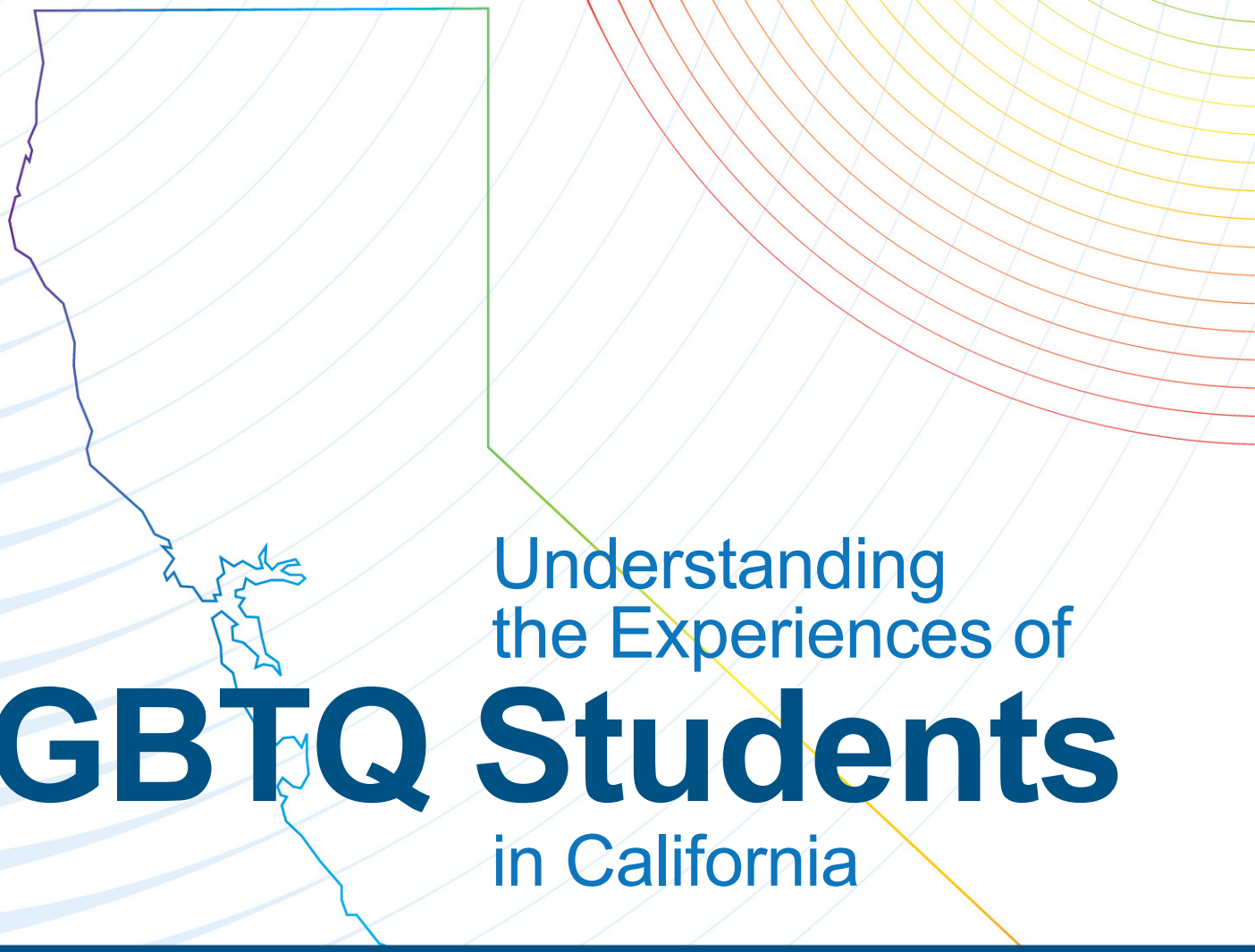
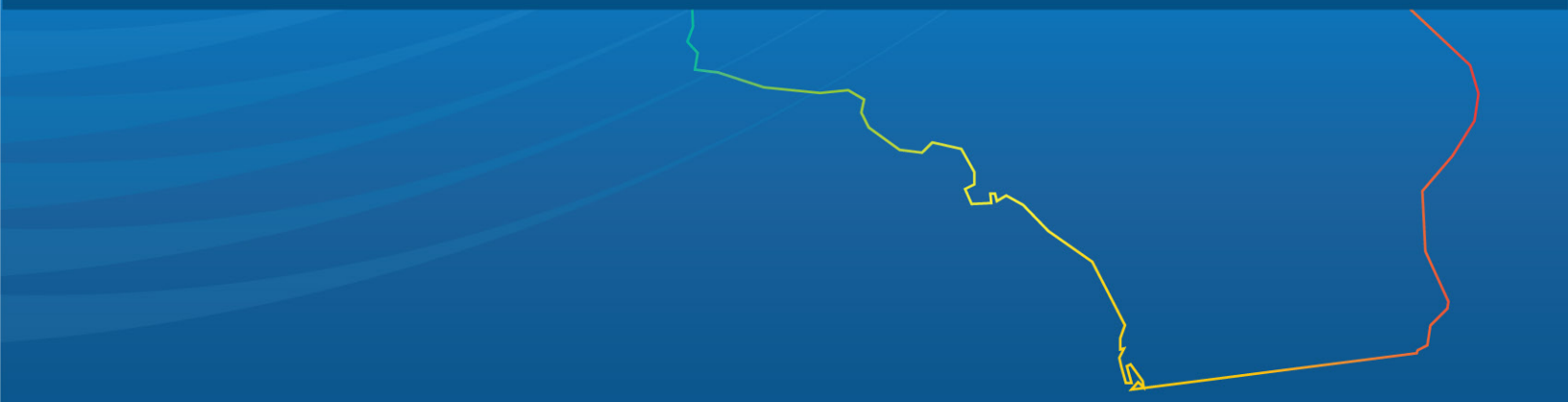


Understanding the Experiences of LGBTQ Students in California

Thomas Hanson, Gary Zhang, Rebeca Cerna, Alexis Stern, Greg Austin



October 2019 • Prepared for The California Endowment

Acknowledgments

We would like to thank the California Endowment's Learning and Evaluation Department, especially Lori Nascimento and Elizabeth Rocha, for their invaluable feedback and guidance.

For reviewing and providing essential feedback on drafts of this report, we would like to thank Jenny Betz, WestEd; Barbara Dietsch, WestEd; Tony Fong, WestEd; Tia Martinez, Forward Change; Stacy Lee, Children Now; and Ashley De Alba, Children Now.

Suggested citation: Hanson, T., Zhang, G., Cerna, R., Stern, A., & Austin, G. (2019). *Understanding the experiences of LGBTQ students in California.* San Francisco, CA: WestEd.

WestEd is a nonpartisan, nonprofit research, development, and service agency that works with education and other communities throughout the United States and abroad to promote excellence, achieve equity, and improve learning for children, youth, and adults. WestEd has more than a dozen offices nationwide, from Massachusetts, Vermont, Georgia, and Washington, DC, to Arizona and California, with headquarters in San Francisco.

WestEd
WestEd.org

Contents

LIST OF BOXES

LIST OF EXHIBITS

LIST OF TABLES

Executive Summary

Research shows that lesbian, gay, bisexual, transgender, and questioning or queer (LGBTQ) youth are at high risk for bullying and violence victimization, poor mental health, alcohol and other drug use, and poor academic performance. In California, the availability of data from the California Healthy Kids Survey (CHKS) offers educators, school administrators, and state officials an important opportunity to explore how LGBTQ students — and other populations — perceive their school climate and how those perceptions relate to their academic success and emotional well-being. Previous research using data from CHKS has produced important findings regarding the experiences of LGBTQ students in California middle and high schools (WestEd, 2018). The present study builds on this research by using two years of CHKS data from grades 7, 9, and 11 in California schools to explore the relationships between students' sexual orientation, gender identity, experiences of bullying and harassment, emotional well-being, and school climate. Results are presented for three gender identity categories (transgender, not transgender, and "not sure") and for five sexual orientation categories (straight, gay/lesbian, bisexual, "not sure yet," and "something else"). In previous research, multiple gender identity and sexual orientation categories have typically been aggregated into a single LGBTQ sample, making it difficult to draw conclusions regarding differences in students' experiences based on these two aspects of their identities. This report disaggregates data on gender identity and sexual orientation in order to provide a more complete and nuanced picture of LGBTQ students' experiences in school.

Analyses performed in this study using CHKS data indicate that LGBTQ youth receive substantially fewer social supports from teachers and peers at school than their counterparts who do not identify as LGBTQ. Aggregated CHKS data contain arguably more data on LGBTQ youth than any other source of data in the nation. This report uses CHKS data to address the following questions:

1. What disparities by gender identity exist in students' reports of school supports, school safety, mental health, school engagement, and academic performance in public middle and high schools in California?
2. What disparities by sexual orientation exist in students' reports of school supports, school safety, mental health, school engagement, and academic performance in public middle and high schools in California?
3. To what extent can differences in school supports and school safety explain why LGBTQ students report poorer mental health, school engagement, and academic performance outcomes than non-LGBTQ peers?

Each of these questions has important implications for policy and practice and acts as a call to action to ensure that schools are safe, supportive, and affirming environments for LGBTQ students. The answers to the first two questions document the unmet needs and challenges of LGBTQ youth in public middle and high schools in California. The third question examines the extent to which LGBTQ students' lack of strong school supports and greater exposure to violence and harassment may account for corresponding disparities in

their mental health, school engagement, and academic performance when compared with their non-LGBTQ peers. The findings presented here provide suggestive evidence that improving LGBTQ students' experiences of safety and supports at school could help to close disparities between LGBTQ students and their non-LGBTQ peers in terms of mental health, school engagement, and academic performance.

Key Findings

The following describes the key findings for LGBTQ students compared to their non-transgender and straight peers:

Disparities in Students' Reported Experiences of School Supports, Safety in School, School Engagement, Academic Performance, and Mental Health by Sexual Orientation and Gender Identity

- On all 14 measures analyzed in this report, students who identified as transgender, gay/lesbian, bisexual, and "something else" (a sexual orientation other than straight, gay/lesbian, or bisexual), as well as students who were unsure of their gender identity or sexual orientation, reported significantly fewer positive perceptions of and experiences at school and of their own well-being than their non-transgender and straight peers.
- Transgender, gay or lesbian, and bisexual students were:
  - Less likely than their non-transgender and straight peers to report the presence of key school supports, to be engaged in school, or to report a high grade point average.
  - More likely than their non-transgender and straight peers to report being the target of physical and verbal victimization at school by their peers.
  - Less likely than their non-transgender and straight peers to report feeling safe at school.
  - More likely than their non-transgender and straight peers to report experiencing chronic sadness and contemplating suicide.
- Students who indicated being "not sure" if they were transgender or "not sure yet" about their sexual orientation were more likely to report lower levels of supports and well-being on all outcomes, compared to their straight and non-transgender peers, but reported higher supports and well-being than their transgender, gay/lesbian, and bisexual peers.
- High school students who identified their sexual orientation as "something else" (not straight, gay or lesbian, or bisexual) were less likely than straight, gay/lesbian, or bisexual high school students to report being supported in school, feeling safe, and being motivated and connected to school.
- Transgender and bisexual high school students were more likely than students of other gender identities and sexual orientations to experience chronic sadness and to contemplate suicide.
- The biggest disparities between LGBTQ subgroups are evident in the data on students' experiences of physical harassment and bullying.

- Across school levels, transgender students were more than twice as likely as their non-transgender peers to indicate that they had experienced bullying or harassment and were in fear of physical violence.
- Similarly, gay, lesbian, and bisexual students were twice as likely as straight students to indicate that they had experienced bullying or harassment and feared violence at school.

Accounting for Gender Identity and Sexual Orientation Disparities in School Engagement, Performance, and Mental Health

- Transgender students' lack of perceived key developmental supports and safety at school explains a significant proportion of the differences in how transgender students and non-transgender students describe their school engagement, academic performance, and mental health. The analyses indicate that after the key school supports and safety measures used in this analysis were adjusted such that transgender students perceived their schools to be equally as safe and equally as supportive as non-transgender students perceived their schools to be:
  - disparities in school connectedness are eliminated;
  - disparities in mental health, academic motivation, and middle school academic performance are reduced by 50 percent; and
  - disparities in school absences and high school academic performance are reduced by between 25 and 30 percent.
- Differences in reported school supports and school safety also explain much of the disparities across sexual orientation groups. The analysis suggests that if gay, lesbian, and bisexual students experienced the same perceived levels of developmental supports and safety at school as straight students:
  - disparities in school connectedness would be reduced by between 90 and 100 percent; and
  - disparities in mental health, academic motivation, and academic performance in school would be reduced by half.

These results suggest that schools could play a role in significantly improving the well-being of LGBTQ students by providing supportive environments that address their needs for safety and support at school. However, these results should be interpreted cautiously. The relationships examined are correlational and are based on a particular statistical model using cross-sectional data. Moreover, the adjusted results only account for *current* disparities in perceived school supports and safety. They do not adjust for exposure to fear of physical violence, victimization, and low levels of support in prior years. Rigorous evaluation research is needed to better ascertain the extent to which providing more and better school supports and enhancing safety can improve the well-being of LGBTQ students.

Introduction

Adolescence is recognized as a critical period in a young person's cognitive, emotional, and identity development. Research shows that adolescents' experiences in school can have a particularly important influence on their academic and social-emotional growth, physical health, and emotional well-being (Eccles & Roeser, 2011). Educators and school administrators recognize that part of providing students with a quality education involves facilitating a positive school climate and providing students with targeted social and emotional supports that foster positive developmental outcomes. For students who identify as lesbian, gay, bisexual, transgender, queer, or questioning (LGBTQ), these supports can be particularly important in ensuring that they are able to meet their full potential (Russell, Kosciw, Horn, & Saewyc, 2010). To shed light on the well-being and experiences of LGBTQ youth in school, this report describes the results of analyzing data from the California Healthy Kids Survey, differentiating results by gender identity and by sexual orientation. These analyses are guided by three questions:

1. What disparities by gender identity exist in students' reports of school supports, school safety, mental health, school engagement, and academic performance in public middle and high schools in California?
2. What disparities by sexual orientation exist in students' reports of school supports, school safety, mental health, school engagement, and academic performance in public middle and high schools in California?
3. To what extent can differences in school supports and school safety explain why LGBTQ students report poorer mental health, school engagement, and academic performance outcomes than non-LGBTQ peers?

Every person has a gender identity and a sexual orientation, but these two aspects of identity are separate, and it is important to distinguish between them. Sexual orientation is "a person's emotional, sexual, and/or relational attraction to others" (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). People may describe their sexual orientation in a range of ways, using terms including but not limited to asexual, bisexual, gay, heterosexual, homosexual, lesbian, pansexual, queer, questioning, or straight. In contrast, gender identity is "how you identify and see yourself," which may or may not match any specific term or align with the sex assigned at birth (GLSEN, 2019a). People may describe their gender identity using an array of terms including but not limited to cisgender (male or female), gender fluid, gender nonconforming, genderqueer, nonbinary, transgender, queer, or questioning. Sexual orientation and gender identity are also distinct from the concepts of biological sex and gender expression. This study reports results separately for sexual orientation and for transgender identity.

KEY TERMS USED IN THIS REPORT

LGBTQ is an acronym referring to lesbian, gay, bisexual, transgender, and questioning or queer people and identities. It is also commonly used as an umbrella term encompassing the diversity of sexual orientations and gender identities that are not straight or cisgender.

Gender identity is "how you identify and see yourself" (GLSEN, 2019a). If your gender identity matches the sex you were assigned at birth, then you might describe yourself as **cisgender**. If your gender identity does not match the sex you were assigned at birth, then you might describe yourself as **transgender**. If you are neither cisgender nor transgender, you might also describe yourself as **gender fluid**, **gender nonconforming**, **genderqueer**, **nonbinary**, or **queer**, among other terms. If you are still exploring your gender identity or gender expression, then you might describe yourself as **questioning**.

Sexual orientation is "a person's emotional, sexual, and/or relational attraction to others" (SAMHSA, 2014). If you are attracted to others of the same gender, then you might describe yourself as **lesbian** or **gay**. If you are attracted to others of a different gender, then you might describe yourself as **straight** or **heterosexual**. If you are attracted to your own gender and genders other than your own, then you might describe yourself as **bisexual**. If you are attracted to people of all genders, then you might describe yourself as **pansexual**. If you are still exploring your sexual orientation, then you might describe yourself as **questioning**. If your sexual orientation is not heterosexual or straight, you might describe yourself as **queer**.

Note: For definitions of these and other terms describing sexual orientation and gender identity, see GLSEN's gender terminology discussion guide, available at https://www.glsen.org/sites/default/files/Gender%20Terminology%20Guide.pdf, and GLSEN's summary of key concepts and terms, available at https://www.glsen.org/sites/default/files/GLSEN%20Terms%20and%20Concepts%20Thematic.pdf.

Discrimination and Bias

It is common for LGBTQ people in the United States to encounter discrimination and bias in response to their sexual orientation and/or gender identity. Young people — particularly youth of color — can face negative consequences for identifying or being perceived as LGBTQ, beginning as early as elementary school (GLSEN, ASCA, ACSSW, & SSWAA, 2019; GLSEN & Harris Interactive, 2012; Crossroads Collaborative at the University of Arizona & Gay-Straight Alliance Network, 2014). Although research shows that "outness" is associated with improved self-esteem and mental health (Kosciw, Palmer, & Kull, 2015), youth who openly identify as LGBTQ also risk increased victimization by their peers and negative reactions by parents and other family and community members (Kosciw et al., 2015; SAMHSA, 2014). They may also have adverse experiences because cisgender and straight parents may be struggling to know how best to support their LGBTQ children in navigating an experience and identity that they do not share (SAMHSA, 2014). However, friends and families who are supportive of LGBTQ adolescents can have a protective influence that fosters healthy development (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010; Shilo & Savaya, 2011).

LGBTQ students are a diverse group in many ways — their experiences and their outcomes vary by geography, age, and race/ethnicity, among other factors (Kosciw, Greytak, & Diaz, 2009). However, overall, compared with their straight and cisgender peers, LGBTQ students are at a higher risk for a variety of adverse experiences and outcomes. Research indicates that there are significant disparities in health risks among lesbian, gay, and bisexual adolescents in comparison with straight adolescents, with lesbian, gay, and

bisexual youth being more likely to engage in substance use and higher-risk sexual behaviors, and slightly more likely to make a suicide attempt than their straight peers (Kann et al., 2016). Transgender youth are known to be at a particularly high risk of violent victimization, substance use, suicide, and sexually risky behaviors. In a study of 131,000 high school students across 10 states and nine large school districts, the 1.8 percent of respondents who identified as transgender were more likely than their cisgender peers to report violent bullying or harassment, substance use, risky sexual behavior, and suicide attempts (Johns et al., 2019). LGBTQ students are also at a disproportionate risk of receiving an out-of-school suspension or expulsion, becoming involved with the juvenile justice system, or becoming homeless (Skiba, Arredondo, & Rausch, 2014; Morton, Samuels, Dworsky, & Patel, 2018).

One reason for these negative outcomes is the higher rate of peer victimization that LGBTQ students experience compared with their straight and cisgender peers (Day, Snapp, & Russell, 2016; Austin, Nakamoto, & Bailey, 2010). Research indicates a strong link between bullying or perceived discrimination and elevated risk of depression symptoms, emotional distress, and suicidal ideation, as well as substance use and other health-risk behaviors (Almeida, Johnson, Corliss, Molnar, & Azrael, 2009; Bontempo & D'Augelli, 2002; D'Augelli, Pilkington, & Hershberger, 2002; Marshall, Yarber, Sherwood-Laughlin, Gray, & Estell, 2015; Russell & Joyner, 2001). Peer victimization based on real or perceived sexual orientation or gender identity has also been associated with lower grades, poorer school connectedness and attendance, and lower levels of self-esteem (Baams, Russell, & Talmage, 2017; Kosciw, Palmer, Kull, & Greytak, 2013; Robinson & Espelage, 2011; Russell et al., 2006; Birkett, Espelage, & Koenig, 2009; Day et al., 2016; Austin et al., 2010). Students who are questioning their sexual orientation have also been found to report higher rates of depression and suicidal feelings than their straight peers (Birkett et al., 2009).

Blais, Bergeron, Duford, Boislard, and Hébert (2015) concluded that homophobic bullying and victimization was one of the main risk factors for elevated rates of psychological distress, suicidality, and substance misuse among LGBTQ youth. Youth Risk Behavior Survey (YRBS) data provide evidence that the combined effect of identifying as lesbian, gay, or bisexual and high levels of at-school victimization was associated with the highest levels of health-risk behaviors and that differences in health risks among lesbian, gay, and bisexual youth are mediated by victimization at school (Bontempo & D'Augelli, 2002). Liu and Mustanski (2012) found that victimization experienced across assessment waves prospectively predicted self-harm and suicidal ideation. Indeed, after suicide attempt history, LGBTQ victimization was the strongest predictor of self-harm, associated with a 2.5-fold increased risk. Furthermore, each additional time that an LGBTQ youth experiences this type of bias-based victimization further increases the risk that they will engage in self-harming behavior (Mustanski, Garofolo, & Emerson, 2010). Bouris, Everett, Heath, Elsaesser, and Neilands (2016), analyzing YRBS data, concluded that the elevated risk of suicidality among LGBTQ youth functioned indirectly through two forms of school-based victimization: being threatened or injured with a weapon and experiencing harassment based on real or perceived sexual orientation or gender identity (also see Rivers & Noret, 2008). The main conclusion reached across studies is that schools can do much to address disparities across gender identity and sexual orientation groups by creating safer environments (e.g., Hatzenbuehler, Birkett, Van, & Meyer, 2014).

Inclusive and Targeted School Supports

Research indicates that the presence of targeted supports and a positive and inclusive school environment may help to mitigate these risks for LGBTQ students. For example, Day and colleagues (2016) reported that supportive, rather than punitive and exclusionary, school policies and practices reduce bias-based bullying of LGBTQ youth and increase LGBTQ students' perceptions of school connectedness. Moreover, evidence indicates that creating a positive school climate for LGBTQ youth improves outcomes for other students as well. Similarly, Birkett and colleagues (2009) indicated that a positive school climate, in which students experienced supportive relationships with adults at school and did not experience homophobic teasing, is associated with better mental health and truancy outcomes, as well as lower rates of drug and alcohol use, for *all* students, regardless of sexual orientation. Just like friends and family, the school can have both a negative and a positive (protective) effect on the development and well-being of LGBTQ students.

In general, research shows that LGBTQ youth experience lower levels of adult support than non-LGBTQ youth and that having adult support is a key factor in their well-being. Most of the research has been on supports provided by out-of-school adults, but increasing attention has been directed at adult support in school. Coulter, Schneider, Beadnell, and O'Donnell (2017) linked suicidality to lack of adult support out of school but also reported that gay/lesbian, bisexual, and youth questioning their sexual orientation were 5–7 percent less likely to have within-school adult support than straight youth, although the difference was significant only for questioning youth. Marshall and colleagues (2015) concluded that supportive school personnel were crucial to the coping and survival of bullied sexual minority youth.

Day and colleagues (2016) further found that positive, supportive, nonpunitive school policies and practices were associated with less homophobic bullying and with higher levels of school connectedness. Supportive practices also served as a protective factor for students who had experienced homophobic bullying, mitigating its adverse effect. The findings add to previous research demonstrating that punitive practices do not deter bullying or create a safer campus and that punitive practices reduce student connectedness.

This report's analysis of CHKS data adds to the large body of literature indicating that when adults at school provide youth with three fundamental developmental supports (those measured by the CHKS) — caring adult relationships, high expectations for students, and opportunities for meaningful participation in the classroom and school community — youth are more likely to acquire a sense of psychological safety and to feel connected to school, resulting in more positive academic, behavioral, and personal outcomes, including resiliency. A fundamental reason is that these supports meet the basic developmental needs of youth and serve as protective factors that mitigate against the risk factors they may experience in their lives (Benard, 2004).

The research on the lack of adult support experienced by LGBTQ youth argues for making the implementation of developmental supports by school staff a top priority. The presence of caring adult relationships is arguably most important. Russell, Seif, and Truong (2001) found that relationships with teachers played a leading role in explaining the school experiences of LGBTQ adolescents. Youth with positive feelings about their teachers were significantly less likely than their peers to experience challenges in school. They concluded that teacher training and professional development are important to improving teachers' awareness of and responsiveness to the experiences and needs of LGBTQ students.

There are numerous ways in which schools can help ensure inclusive, affirming, and safe learning environments for LGBTQ students. Examples of supportive school policies and practices may include, but are not limited to, the development of written guidance describing the school's commitment to protecting the civil rights of LGBTQ students, particularly for transgender students in typically gendered spaces and activities (including restrooms, school dances, athletic activities, or locker rooms); implementation of LGBTQ-inclusive curricula across all subjects and grade levels; development of trusting and supportive relationships between students and teachers; and respect for students' privacy regarding their sexual orientation and gender identity (Ally Action, 2011; Kann et al., 2016).

Another strategy often used by schools to promote a more positive climate for LGBTQ students is the creation of a gay-straight alliance, or gender and sexuality alliance, often referred to as a GSA. A GSA is a student-led group or club dedicated to creating a safe environment and advocacy platform for LGBTQ students and their allies. Some studies suggest that the presence of a GSA at school can significantly reduce bias-driven victimization of LGBTQ students (Marx & Kettrey, 2016) and improve indicators of their mental health (e.g., reduced suicide attempts) (Davis, Stafford, & Pullig, 2014). One study that asked young adults (ages 21–25) to retrospectively provide details of their high school experiences also found a positive association between participation in a high school GSA and college-level educational attainment for LGBTQ youth. However, the study authors found that participation in a high school GSA only seemed to act as a protective factor against the negative effects (e.g., depression) of low levels of peer victimization, but not against higher levels of bullying or harassment (Toomey, Ryan, Diaz, & Russell, 2011).

Although both federal and California laws offer protections for LGBTQ students in schools,[1] legal requirements may not be enough to guarantee that schools will provide LGBTQ students with the supports they need. Responses to the GLSEN 2017 National School Climate Survey highlight this challenge. For example, while 98 percent of California respondents were able to identify a staff member at their school who supported LGBTQ students, fewer students reported the presence of formalized school policies supporting or protecting students based on sexual orientation or gender identity (GLSEN, 2019b). Furthermore, although California law mandates that schools provide sexual health education that is inclusive of LGBTQ students (see Cal. Educ. Code §§ 51930-51939), fewer than 15 percent of respondents to the GLSEN 2017 survey reported that such sexual health education was provided in their school (GLSEN, 2019b). Similarly, while California law requires that social studies curricula in public schools include historical figures who were LGBTQ (see Cal. Educ. Code §§ 51204, 51500, 51501, 60040, 60044), only 31 percent of respondents to the 2017 survey in California reported being "taught positive representations of LGBTQ people, history, or events" (GLSEN, 2019b, p. 2).

[1] For more information about federal and California state protections for LGBTQ students, see websites from the California Department of Education (https://www.cde.ca.gov/ls/he/se/), the ACLU of Northern California (https://www.aclunc.org/our-work/know-your-rights/transgender-student-rights-school), the ACLU of Southern California (https://www.aclusocal.org/en/know-your-rights/lgbtq-student-rights), and/or Lambda Legal (https://www.lambdalegal.org/know-your-rights/article/youth-how-the-law-protects).

Sample and Method

California Healthy Kids Survey

The California Healthy Kids Survey (CHKS) was developed in 1998 by WestEd for the California Department of Education (CDE). As explained further in Appendix A, the CHKS is an anonymous modular assessment for students ages 10 (grade 5) and above. Although participation in the CHKS is widespread across the state and has been growing since the state introduced the Local Control Accountability Plan (LCAP) data requirements, the CHKS has been voluntary since 2010 (except in districts that receive tobacco prevention grants from the CDE). To participate in this state-subsidized survey, the CDE minimally requires that districts administer the survey in grades 7 and 9 in order to capture comparable data across the state.

Sample Selection and Size

This study uses pooled data from the administration of the CHKS in 2,749 secondary schools in the two academic years spanning 2017–19. A two-year period is used in this study because the majority of participating California districts administer the CHKS once every two years but at different times within the two-year period. Thus, two years of data are necessary to assemble a database that includes a majority of participating districts. During the 2017–19 period, 70 percent of California school districts administered the survey to more than 1.2 million elementary and secondary students.

This report presents analyses based on data collected from approximately 800,000 secondary students in grades 7, 9, and 11. Elementary students and students in non-traditional schools were not included in this sample. For the purposes of this study, students in grade 7 are described as middle school students and students in grades 9 and 11 are combined into a single high school category. Analyses are conducted for middle schools and secondary schools separately, with data broken down by students' gender identity and by sexual orientation. The sample sizes vary by item depending on the number of respondents.

This study separately examines two independent variables: gender identity and sexual orientation. Gender identity is operationalized on the CHKS using the question, "Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?" with four response options: "no, I am not transgender," "yes, I am transgender," "I am not sure if I am transgender," and "decline to respond." For the purposes of this study, data from students who declined to respond to this question were omitted from the analysis results.

Table 1 presents the distribution of respondents by gender identity and school level. A total of 804,683 students responded to the question about gender identity. Among the respondents, there were 288,646 middle school students and 516,037 high school students. Of these, 8,727 (about 1.1%) self-identified as transgender and 14,908 (about 1.9%) responded as "not sure" if they were transgender. The remaining respondents (about 97.1% percent) indicated they were "not transgender." It is important to note that not

all of the non-transgender students were necessarily cisgender; some non-transgender students in this sample might have identified as a gender different from their sex assigned at birth, but they might not have felt that the term "transgender" described them. This group might be expected to encounter some of the same challenges as other LGBTQ students, but their experiences and perceptions cannot be disaggregated from those of cisgender students in this study.

TABLE 1.

Survey Respondents, by Gender Identity and School Level

Gender identity	Middle %	Middle *N*	High %	High *N*	Total %	Total *N*
No, I am not transgender	96.7	279,038	97.3	502,010	97.1	781,048
Yes, I am transgender	0.9	2,502	1.2	6,225	1.1	8,727
I am not sure if I am transgender	2.5	7,106	1.5	7,802	1.9	14,908
Total	--	288,646	--	516,037	--	804,683

Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Percentages may not total 100 because of rounding.

Sexual orientation is assessed on the CHKS using the question, "Which of the following best describes you?" with six response options: "straight," "gay or lesbian," "bisexual," "I am not sure yet," "something else," and "decline to respond." For the purposes of this study, data from students who declined to respond to this question were omitted from the analysis results.

Table 2 presents the distribution of students by sexual orientation and school level. A total of 796,079 students responded to the question about sexual orientation. Among the respondents to this question, 281,916 were middle school students and 514,163 were high school students. Of these, 1.7 percent self-identified as gay or lesbian, 5.5 percent as bisexual, 4.9 percent as "not sure yet" about their sexual orientation, and 1.8 percent as another sexual orientation not listed ("something else").

TABLE 2.

Survey Respondents, by Sexual Orientation and School Level

Sexual orientation	Middle %	Middle *N*	High %	High *N*	Total %	Total *N*
Straight	86.4	243,642	85.9	441,403	86.1	685,045
Gay or Lesbian	1.1	3,029	2.0	10,169	1.7	13,198
Bisexual	4.2	11,924	6.2	32,030	5.5	43,954
I am not sure yet	6.5	18,185	4.1	21,168	4.9	39,353
Something else	1.8	5,136	1.8	9,393	1.8	14,529
Total	--	281,916	--	514,163	--	796,079

Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Percentages may not total 100 because of rounding.

Most students identified with one of the provided response options for gender identity and sexual orientation. In middle school, 97.6 percent of students responded either "yes" or "no" to the question about being transgender, and 91.7 percent indicated being straight, gay or lesbian, or bisexual. In high school, 98.5 percent of students responded either "yes" or "no" to the question about being transgender, and 94.1 percent indicated being straight, gay or lesbian, or bisexual. Another 1.8 percent of students in middle and high school selected "something else" to describe their sexual orientation, suggesting that their identity in this respect does not conform to any of the other options listed on the survey (straight, gay or lesbian, or bisexual).

At the same time, a number of students reported uncertainty about their gender identity or sexual orientation. As expected, this percentage was lower in high school than in middle school, while a greater percentage of high school than middle school respondents identified as transgender, gay or lesbian, or bisexual. Among middle school students, 2.5 percent indicated being "not sure" about whether they were transgender, and 6.5 percent indicated being "not sure" about their sexual orientation. In contrast, among high school students, 1.5 percent reported being "not sure" about whether they were transgender, and 4.1 percent reported being "not sure" about their sexual orientation. It is possible that some students who responded "not sure" to one or both of these two questions would describe themselves as "questioning" their gender identity or sexual orientation, but they could also have been unsure about how the response options were being defined and whether those terms were a fit for their own identities. However, given the age of the students taking the survey, it is unlikely that they were unfamiliar with the terms.

Selected Measures

This study examines 14 measures organized into five domains: school supports, school safety, mental health, school engagement, and academic performance. Table 3 provides a list of all the measures and describes how each measure is operationalized.

- The **school supports** domain consists of four multi-item, school-based scales: Caring Adult Relationships, High Expectations, Opportunities for Meaningful Participation, and Promotion of Parental Involvement. These scales measure students' experiences of caring relationships with adults in their school, being held to high expectations at school, feeling able to participate in school activities and the school community, and their schools' efforts to support parent involvement.
- The **school safety** domain includes four yes/no items measuring whether or not students felt safe at school, were afraid of being beaten up, experienced any type of harassment or bullying, or had mean rumors or lies spread about them.
- The **mental health** domain includes two items measuring whether or not students experienced chronic sadness or contemplated suicide.
- The **school engagement** domain includes a scale measuring students' sense of school connectedness, a scale for academic motivation, and an item indicating whether or not students missed at least 1 day of school, for any reason, in the past 30 days.

- The **academic performance** domain includes a single item measuring students' self-reported grades.

TABLE 3.

List of Selected Measures

Construct	CHKS Survey Measure and Operationalization
School Supports Domain	
Caring Adult Relationships scale (in school)	(Three-item scale) At my school, there is a teacher or some other adult...who really cares about me; ...who notices I'm not there; ...who listens to me when I have something to say. % of students responding "*pretty much true*" or "*very much true*" to items in scale
High Expectations scale (in school)	(Three-item scale) At my school, there is a teacher or some other adult...who tells me when I do a good job; ...who always wants me to do my best; ...who believes that I will be a success. % of students responding *"pretty much true"* or *"very much true"* to items in scale
Opportunities for Meaningful Participation scale (in school)	(Three-item scale) At school...I do interesting activities; ...I help decide things like class activities; ...I do things that make a difference. % of students responding *"pretty much true"* or *"very much true"* to items in scale
Promotion of Parental Involvement scale	(Three-item scale) Teachers at this school communicate with parents; Parents feel welcome to participate at this school; School staff take parent concerns seriously. % of students responding "*agree*" or "*strongly agree*" to all items in scale
School Safety Domain	
Perceived school safety	How safe do you feel when you are at school? % of students responding "*very safe*" or "*safe*"
Fear of being beaten up	In the past 12 months at school, have you been afraid of being beaten up? % of students responding *"1 time," "2–3 times,"* or *"4 or more times"*
Any harassment or bullying	In the past 12 months at school, have you been harassed or bullied for any of the following reasons...? Your race, ethnicity, or national origin; Your religion; Your gender; Because you are gay, lesbian, or bisexual or someone thought you were; A physical or mental disability; You are an immigrant or someone thought you were; Any other reason. % of students responding *"1 time," "2–3 times,"* or *"4 or more times"*
Mean rumors or lies	In the past 12 months at school, have you had mean rumors or lies spread about you? % of students responding *"1 time," "2–3 times,"* or *"4 or more times"*
Mental Health Domain	
Chronic sadness	In the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more that you stopped doing some usual activities? % of students responding "*yes*"

Construct	CHKS Survey Measure and Operationalization
Suicide ideation	In the past 12 months, did you ever seriously consider attempting suicide? % of students responding "*yes*"
School Engagement Domain	
Academic Motivation scale	(Four-item scale) I try hard to make sure that I am good at my schoolwork; I try hard at school because I am interested in my work; I work hard to try to understand new things at school; I am always trying to do better in my schoolwork. % of students responding "*agree*" or "*strongly agree*" to items in scale
School Connectedness scale	(Five-item scale) I feel close to people at this school; I am happy to be at this school; I feel like I am part of this school; The teachers at this school treat me fairly; I feel safe in my school. % of students responding "*agree*" or "*strongly agree*" to all items in scale
Missed school	During the past 30 days, did you miss an entire day of school for any reason? % of students responding "*1 day,*" "*2 days,*" or "*3 or more days*"
Academic Performance Domain	
Self-reported grades earned	During the past 12 months, how would you describe the grades you mostly received in school? % of students responding "*mostly Bs,*" "*mostly As or Bs,*" or "*mostly As*"

The measures selected provide insight into students' perceptions of school climate, including levels of safety, support, and engagement, as well as student academic performance, school connectedness, and risk for mental health problems that are barriers to learning and positive development. For example, the Caring Adult Relationships, High Expectations, and Opportunities for Meaningful Participation scales measure students' perceptions of the presence of three fundamental developmental supports that schools may provide to students. Research has linked these supports to student resilience, social-emotional competencies, and a wide range of positive educational, behavioral, and health outcomes. These supports are also protective factors that mitigate the adverse effects of environmental risk factors that youth may experience. Youth who experience these developmental supports in school also are more likely than their peers to feel connected to school, and this sense of school connectedness has been linked to positive health and academic outcomes (Benard, 2004).

The Promotion of Parental Involvement scale assesses students' perceptions of school efforts and effectiveness in promoting parental participation in school. A large body of evidence has linked student academic success to the degree to which a school communicates with parents and fosters an environment that parents perceive as warm and inviting (Wilder, 2014).

The chronic sadness measure, a single-item measure of depression, comes from the Centers for Disease Control and Prevention's Youth Risk Behavior Survey. This measure has been found to be associated with a wide range of educational and health-related problems and victimization. Chronically sad youth, compared to their peers, report lower levels of school attendance, academic performance, and school connectedness,

and they are more likely to engage in substance use and to have been victimized at school (Austin et al., 2010; Dowdy, Furlong, & Sharkey, 2013).

Analytic Strategy

Simple tabulations of unadjusted means by gender identity/sexual orientation and school grade (grade 7, or grades 9 and 11) are presented to describe disparities in school supports, school safety, mental health, school engagement, and academic performance (research questions 1 and 2). These tabulations are presented separately for gender identity and sexual orientation groups.

To determine the extent to which school supports and school safety may account for LGBTQ/non-LGBTQ disparities in mental health, school engagement, and academic performance (research question 3), regression models are estimated in which each of the outcomes (chronic sadness, suicide ideation, academic motivation, school connectedness, missing school, and academic performance) is modeled as a function of gender identity/sexual orientation and the following control variables: caring adult relationships, high expectations, promotion of parental involvement, perceived school safety, fear of being beaten up, any harassment/bullying, and mean rumors and lies.[2] These models are estimated separately for gender identity and sexual orientation and for middle school students (grade 7) and high school students (grades 9 and 11).

Ordinary least squares or logistic regression models are estimated depending on whether the dependent variable is continuous (e.g., school connectedness) or dichotomous (e.g., suicide ideation). Adjusted means are then calculated by summing the products of each control variable regression coefficient in the model by the corresponding sample mean and then adding the regression intercept and coefficient for each gender identity/sexual orientation group (if applicable).[3] The adjusted means thus reflect the level of each outcome across categories of gender identity or sexual orientation after accounting for differences in school supports and school safety across LGBTQ groups. A comparison of the adjusted means with the unadjusted means for research questions 1 and 2 shows the extent to which school support and school safety may account for gender identity and sexual orientation disparities in mental health, school engagement, and academic performance.

All regression models that were estimated involved conducting tests of statistical significance. Significance tests were also conducted when estimating marginal effects to determine whether the unadjusted and adjusted means were statistically significant. P-values (not shown) were obtained to indicate whether the relationships in the models were statistically significant. A p-value of less than .05 indicated that the relationship observed in the sample is statistically significant and not resulting from random chance.

[2] These regression models did not include controls for opportunities for meaningful participation because the items included in this scale are too closely aligned with school engagement. In addition, "any harraassment" did not include harassment because of being "gay, lesbian, or bisexual or someone thought you were" for research question 3 because responses to this item are strongly dependent on respondents' sexual orientation and thus might over-explain the extent to which harassment accounts for disparities across sexual orientation groups.

[3] With dichotomous outcome variables, adjusted probabilities were calculated using $e^b/(1+e^b)$, where *b* represents the sum of the products of each logistic regression coefficient with the sample means.

Results

Disparities by Gender Identity

Researchers conducted descriptive analyses for each measure in the five CHKS domains of school supports, school safety, mental health, school engagement, and academic performance. The following section presents data on how students in the sample responded to questions in each of these domains, disaggregating the data based on students' self-identified gender: non-transgender, transgender, and "not sure." Appendix B shows the percentage of students in each gender identity category reporting each of the selected measures (Table B1).

Consistent with the literature review, analyses of CHKS survey data indicate disparities between transgender and non-transgender students across all 14 measures and at both the middle and high school levels. With few exceptions, transgender students, and students reporting that they were "not sure" if they were transgender, were less likely to report positive perceptions and experiences of school and of their own well-being than their non-transgender peers. The disparities were greatest for measures of mental health, fear of being beaten up, and experiences of harassment and bullying.

Presence of School Supports, by Gender Identity

Large disparities between transgender and non-transgender students, particularly in middle school, are evident in data from each of the scales measuring the presence of key school supports — specifically, whether students report having relationships with caring adults, being held to high expectations for student achievement, having opportunities to participate meaningfully in school, and seeing schools as promoting a culture of parent involvement. At both the middle and high school levels, differences in the reported presence of school supports were smaller between non-transgender students and students who were "not sure" about their gender identity than they were between transgender and non-transgender students. Students who indicated that they were "not sure" if they were transgender were less likely to report the presence of school supports than non-transgender students but more likely to do so than transgender peers (Exhibit 1). In one exception to this trend, the percentage of transgender high school students reporting the presence of opportunities to participate in school was slightly higher than for high school students who were "not sure" if they were transgender. Overall, transgender students and, to a less extent, students unsure of whether they were transgender, were less likely than their non-transgender peers to report the presence of strong developmental supports in middle and high school.

Caring Adult Relationships and High Expectations. Only about 4 in 10 transgender middle and high school students reported the presence of caring adult relationships in school (42% for middle school, 45% for high school) and about half reported that adults in school held them to high expectations (53% for middle school, 51% for high school). For both measures, these results were about 20 percentage points lower than those

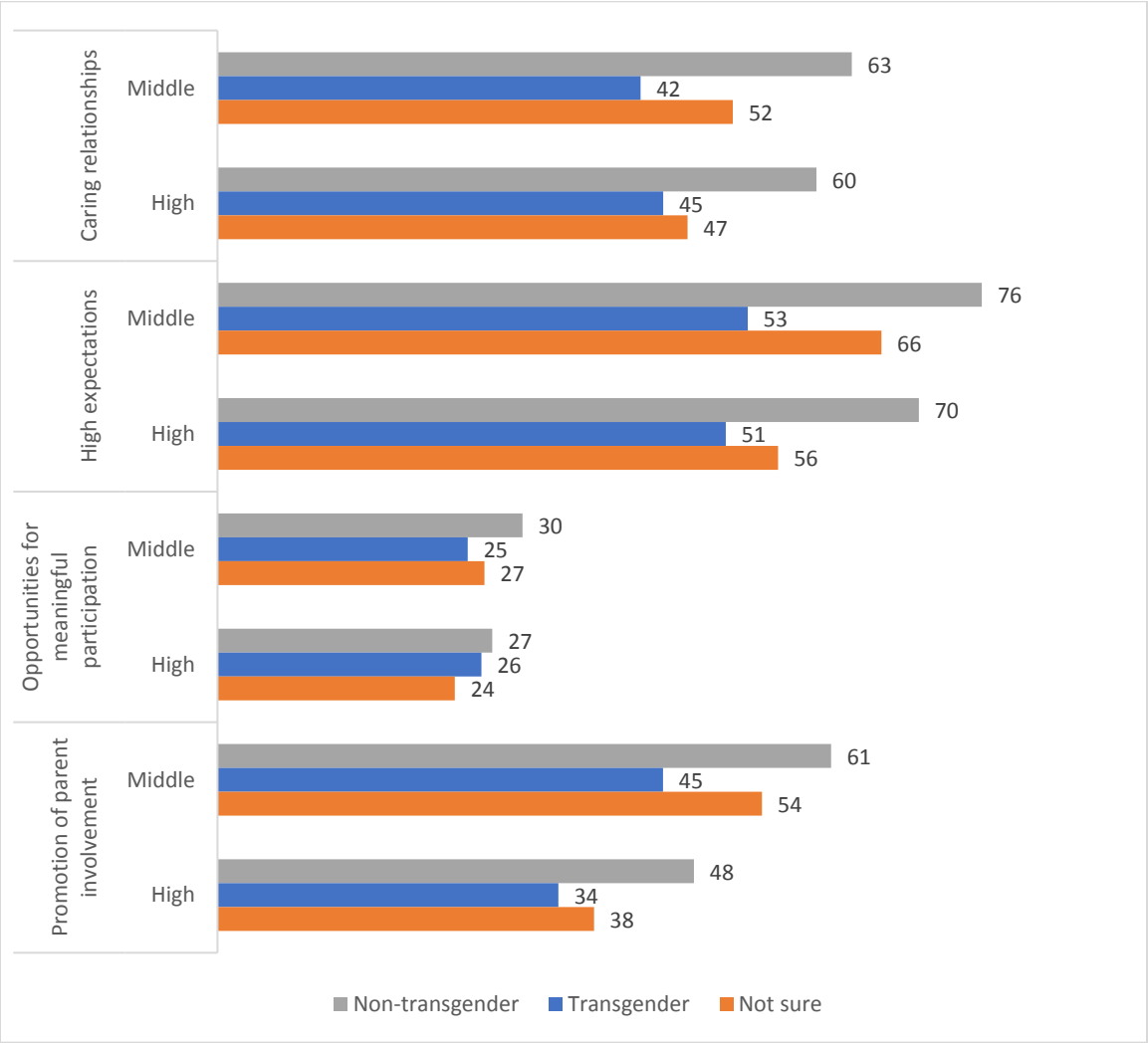
for non-transgender students. Results for students who were "not sure" about their gender identity were slightly more positive than for transgender students.

Opportunities for Meaningful Participation. Although there were differences in how transgender and non-transgender students responded to questions on the scale measuring Opportunities for Meaningful Participation in school, these differences were comparatively small in middle school (for example, transgender students were 5 percentage points less likely to report the presence of these opportunities than non-transgender students) and extremely small in high school (a 1 percentage point difference). However, high school students identifying as "not sure" if they were transgender were less likely than their transgender peers to report being able to participate in school and classroom activities, the only area in the school supports domain for which that disparity exists.

Promotion of Parental Involvement. Only 34 percent of transgender students in high school and 45 percent in middle school indicated a school culture that fostered parental involvement, making them about 15 percentage points less likely than non-transgender students to report that outcome.

EXHIBIT 1.

Percentage of Students Reporting the Presence of School Supports, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. "Caring relationships," "High expectations," and "Opportunities for meaningful participation" indicate percentages of students responding *"pretty much true"* or *"very much true"* to items in scale. "Promotion of parent involvement" indicates percentages of students responding "*agree*" or "*strongly agree*" to items in scale.

Experiences of Victimization and Perceptions of Safety at School, by Gender Identity

There were even larger disparities in all measures of school safety between non-transgender students and both transgender students and, to a lesser extent, students unsure of their gender identity. Transgender students and those "not sure" if they were transgender were markedly more likely to feel unsafe at school and to report experiencing physical and verbal victimization (Exhibits 2 and 3). Transgender students were less likely than non-transgender students to report feeling "safe" or "very safe" in school, and transgender students were more likely than their non-transgender peers to report being afraid of being beaten up and to

report experiencing harassment at school. The largest disparity between transgender and non-transgender students' perceptions of safety was in their fear of physical violence, with transgender high school students four times more likely than their non-transgender peers to fear being physically beaten up (42% versus 10%, respectively).

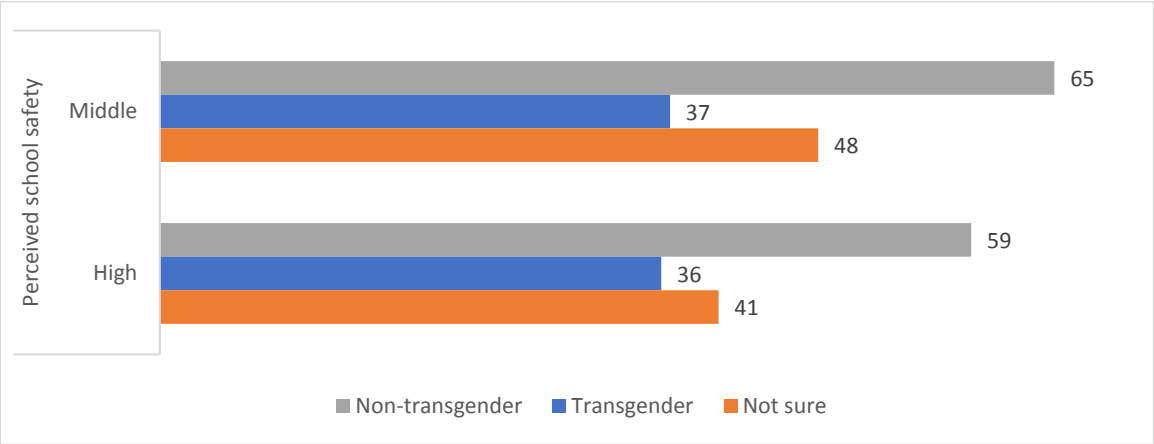
In general, students identifying as "not sure" about their gender identity reported feeling safe, fearing physical violence, and experiencing verbal and physical harassment and bullying at rates that were between those of transgender and non-transgender students, but closer to those of transgender students. However, in high school, students unsure of their gender identity were three times more likely than non-transgender students to report that they were afraid of being beaten up (31% versus 10%, respectively).

Specific results for transgender students, compared to their non-transgender peers, include the following:

- **Perceived Safety at School**. Only a little more than a third of transgender middle and high school students reported feeling "very safe" or "safe" at school. In contrast, nearly two-thirds of non-transgender middle school students and 59 percent of non-transgender high school students reported feeling "very safe" or "safe" at school.
- **Fear of Physical Violence**. Among transgender students, 44 percent of middle school students and 42 percent of high school students reported being afraid of being beaten up, compared to only 19 percent and 10 percent, respectively, for non-transgender students.
- **Harassment/Bullying**. Among transgender students, over two-thirds (70%) in middle school and nearly two-thirds (65%) in high school reported that they had experienced harassment or bullying in the previous 12 months, compared to about one-third (34%) in middle school and less than one-third (28%) in high school for non-transgender students.
- **Verbal Harassment**. Sixty percent of transgender students in middle school and 52 percent in high school reported that they were the target of mean lies or rumors, 1.5 and 1.7 times the percentages, respectively, for non-transgender students (39% for middle school, 31% for high school).

EXHIBIT 2.

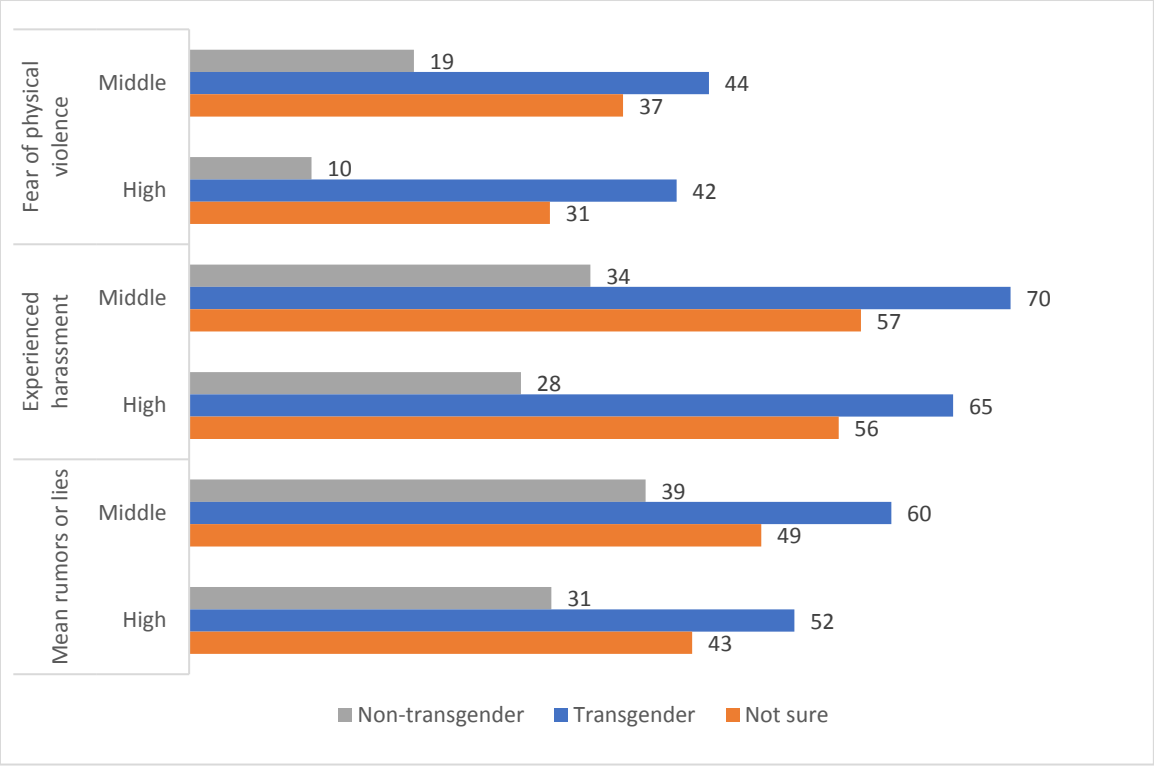
Percentage of Students Reporting That They Feel Safe or Very Safe at School, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*very safe*" or "*safe*" to item.

EXHIBIT 3.

Percentage of Students Reporting Fear of Physical Violence and Victimization, by Gender Identity and School Level



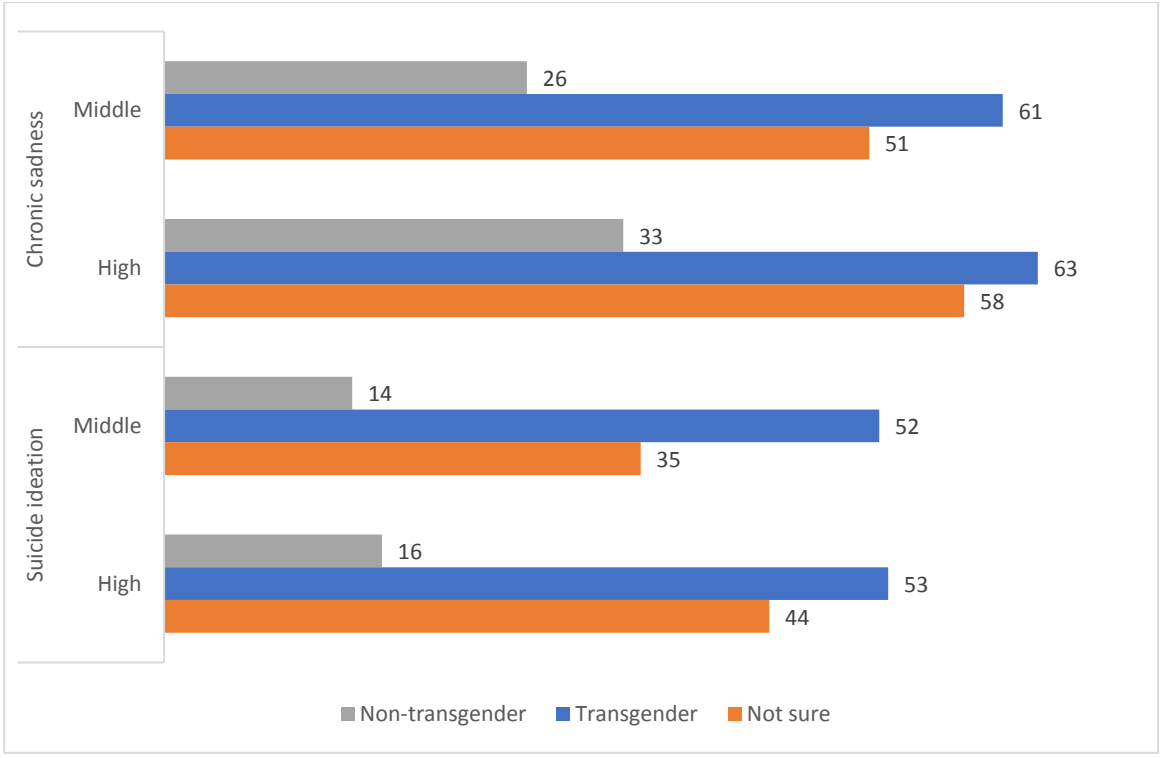
Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*1 time,*" "*2–3 times,*" or "*4 or more times*" to item.

Mental Health, by Gender Identity

The disparities between transgender and non-transgender students were especially large and troubling for the two measures of mental health (Exhibit 4). Around 6 in 10 transgender students in middle and high school reported chronic sadness, and more than half reported contemplating suicide. The differences in mental health between transgender students and their non-transgender peers were greatest in middle school. Transgender middle school students were more than twice as likely as non-transgender peers to report chronic sadness (61% versus 26%), and transgender high school students were almost twice as likely as non-transgender peers to report chronic sadness (63% versus 33%). In a trend consistent across middle and high school, transgender students were also over three times more likely to report suicide ideation (52% in middle school, 53% in high school) than non-transgender peers (14% in middle school, 16% in high school). Students unsure about their gender identity were also more likely than their non-transgender peers to report chronic sadness and suicide ideation, but less likely than transgender students to report these outcomes.

EXHIBIT 4.

Percentage of Students Reporting Poor Mental Health, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*yes*" to item.

School Engagement, by Gender Identity

At both middle and high school levels, transgender students and, to a lesser extent, students unsure of their gender identity, reported being considerably less engaged in school than non-transgender peers, with the

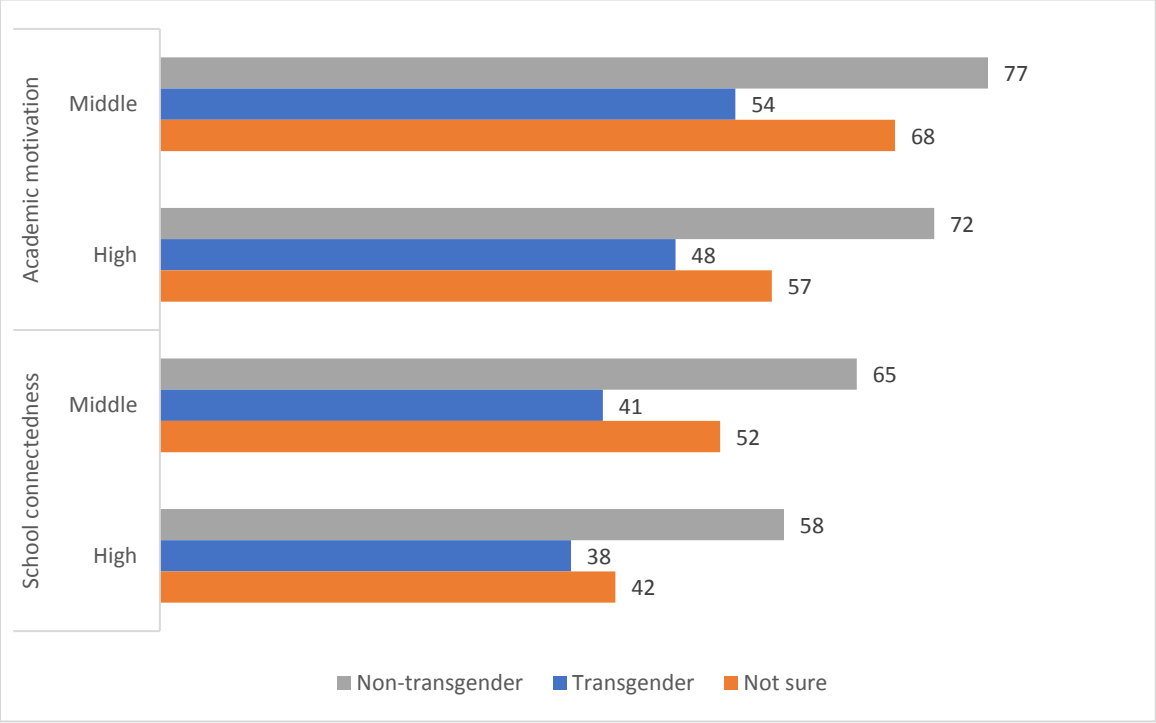
level of engagement among all gender identity subgroups declining between middle and high school (Exhibits 5 and 6).

- **Academic Motivation**. Transgender secondary students were less likely, compared to non-transgender students, to report that they felt academically motivated, at rates of roughly 5 in 10 for transgender students and 7 in 10 for non-transgender students.
- **School Connectedness**. Roughly 4 in 10 transgender secondary students demonstrated school connectedness, compared to 6 in 10 non-transgender secondary students.
- **School Attendance**. Transgender students across both school levels also were more likely to report having missed an entire day of school in the past 30 days for any reason, at rates of roughly 6 in 10, compared to 5 in 10 non-transgender students.

A majority of students who were "not sure" about their gender identity reported high levels of academic motivation and school connectedness, at rates between those of transgender and non-transgender students. However, both middle and high school students in this subgroup were about equally as likely as non-transgender students to report having missed school in the past 30 days (49% in middle school, 56% in high school). At both school levels, transgender students were roughly 10 percentage points more likely to report having missed school than their non-transgender peers.

EXHIBIT 5.

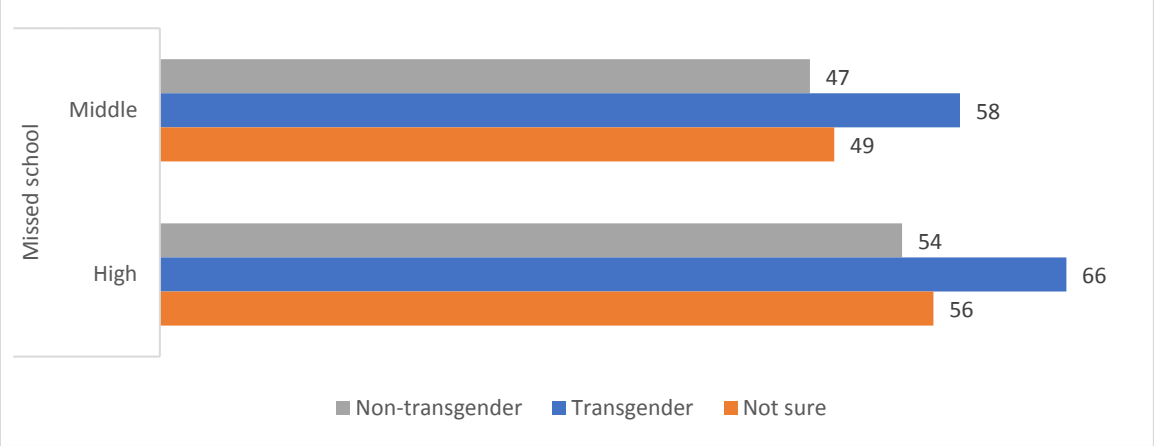
Percentage of Students Reporting Academic Motivation and School Connectedness, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*agree*" or "*strongly agree*" to items in scale.

EXHIBIT 6.

Percentage of Students Reporting Having Missed School, by Gender Identity and School Level



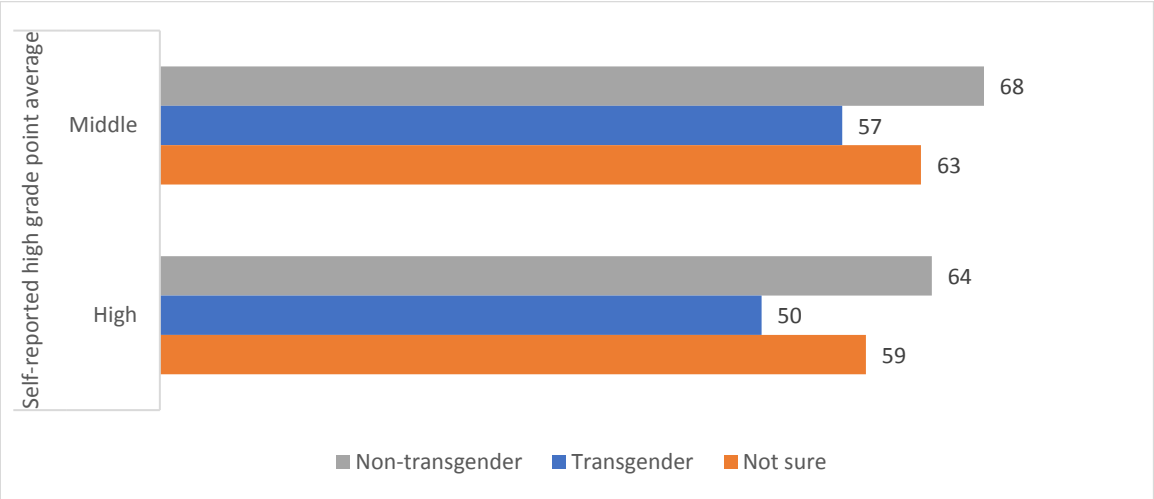
Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*1 day*," "*2 days*," or "*3 or more days*" to item.

Academic Performance, by Gender Identity

Consistent with their lower rates of reporting school engagement, school safety, and school supports, transgender students were less likely to report having a high grade point average (grades of mostly Bs or better) compared to non-transgender students at both school levels (Exhibit 7). Among middle school students, 57 percent of transgender students reported having a high grade point average, compared to 68 percent of non-transgender students. These percentages decreased to 50 percent and 64 percent, respectively, at the high school level. The students who indicated being not sure if they were transgender were less likely to report high grades than non-transgender students.

EXHIBIT 7.

Percentage of Students Reporting a High Grade Point Average, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*mostly Bs,*" "*mostly As or Bs,*" or "*mostly As*" to item.

Disparities by Sexual Orientation

The California Healthy Kids Survey results illustrate the many disparities in school experiences and mental health that exist between youth of different sexual orientations. Researchers used descriptive analyses to identify these disparities for measures in each of the five domains. The analyses disaggregated student responses by five sexual orientation subgroups: straight, gay or lesbian, bisexual, those indicating "not sure yet," and those identifying their sexual orientation as "something else" (e.g., not conforming to any of the provided categories). Appendix B shows the percentage of students in each sexual orientation category reporting each of the selected measures (Table B2).

In both middle and high school and across all 14 measures, straight students were more likely to report positive experiences and outcomes than their peers of other sexual orientations, including those who were "not sure yet." Results were most negative for students identifying as gay/lesbian or bisexual, followed by those for students who described themselves as "something else" or "not sure yet" about their sexual orientation.

In general, differences between the responses of gay/lesbian and bisexual students were relatively small (1 to 3 percentage points), and these differences varied in direction across measures. However, some patterns and important differences emerged. Bisexual students were slightly less likely than gay and lesbian students to report the presence of caring relationships with adults in school, opportunities for meaningful participation in school, or parental involvement promotion. While bisexual students in high school reported harassment/bullying at a marginally lower rate (53%) than their gay and lesbian peers (59%), bisexual students in both middle and high school were much more likely than their peers of any sexual orientation to report experiencing the spread of mean lies or rumors about themselves, chronic sadness, and suicide ideation.

Presence of School Supports, by Sexual Orientation

Students' responses on the four scales measuring school supports (Caring Adult Relationships, High Expectations, Opportunities for Meaningful Participation, and Promotion of Parental Involvement) indicate disparities between students who identify as gay/lesbian or bisexual and those who identify as straight (Exhibit 8). Across indicators, straight students reported the presence of school supports at higher rates than their gay/lesbian and bisexual peers. With few exceptions, these differences were greater in middle school than in high school. Middle school students who identified as "not sure yet" or described their sexual orientation as "something else" reported the presence of school supports at rates between those of gay/lesbian or bisexual peers and straight students. However, high school students describing their sexual orientation as "something else" were less likely than their peers of other sexual orientations to report caring relationships with adults at school, being held to high expectations by adults at school, and having their school promote parental involvement.

Caring Adult Relationships. Only about half of bisexual and gay/lesbian secondary students reported the presence of caring adult relationships in school, compared to over 60 percent of straight students, in both middle and high school. Among middle school students, those who identified as straight (64%) were the most likely to report caring adult relationships at school, while bisexual (50%) and gay/lesbian (52%)

students were the least likely. High school students who reported their sexual orientation as "something else" were the least likely to report caring adult relationships at school (49%).

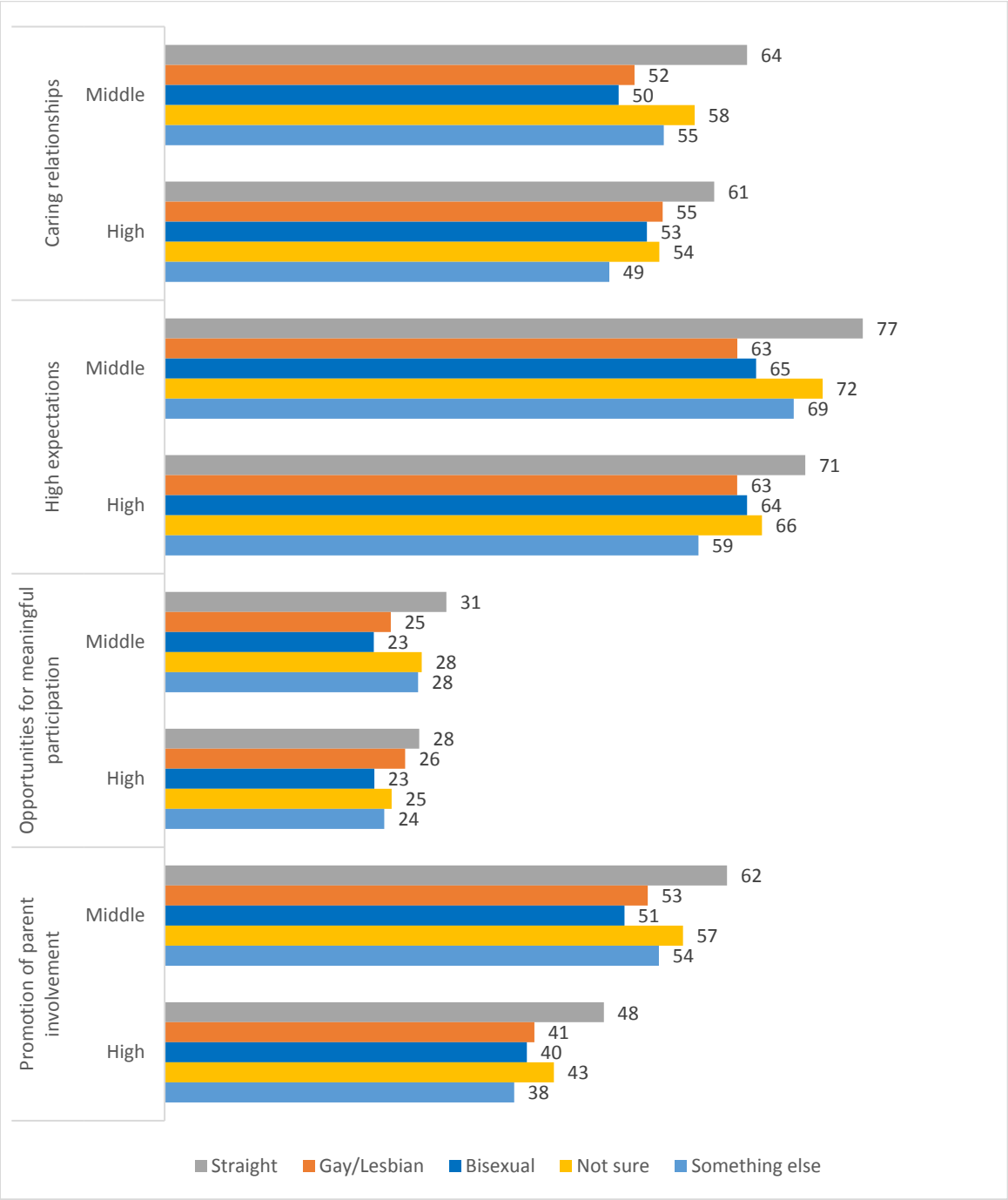
High Expectations. Similarly, students in all of the non-straight subgroups reported being held to high expectations by adults at school at lower rates than did straight students, in both school levels. Gay/lesbian and bisexual students were least likely to report being held to high expectations in middle school. In high school, gay/lesbian students and students who identified their sexual orientation as "something else" were least likely to report being held to high expectations (Exhibit 8). In middle school, gay/lesbian (63%) and bisexual (65%) students were much less likely than their straight peers (77%) to report being held to high expectations at school. Among high school students, those who identified their sexual orientation as "something else" were the least likely (59%), compared to other sexual orientations, to report being held to high expectations by adults at school.

Opportunities for Meaningful Participation. Students of all sexual orientations and across both school levels were unlikely to report that they had opportunities for meaningful participation at school, with rates of positive response to these measures ranging from 23 percent to 31 percent (Exhibit 8). Students who identified as bisexual were the least likely, at 23 percent for both middle and high school, to report meaningful participation opportunities at school.

Promotion of Parental Involvement. Secondary students who identified their sexual orientation as gay/lesbian, bisexual, or "something else" reported that their schools promote parental involvement at rates that were 7 to 11 percentage points lower than those of straight students. Reporting the promotion of parental involvement was particularly rare among middle school bisexual students (51%, compared to 62% for straight students) and among high school students who identified as "something else" (38%, versus 48% for straight students). High school students were less likely than middle school students across all sexual orientation subgroups to report the promotion of parental involvement.

EXHIBIT 8.

Percentage of Students Reporting the Presence of School Supports, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. "Caring relationships," "High expectations," and "Opportunities for meaningful participation" indicate percentages of students responding "pretty much true" or "very much true" to items in scale. "Promotion of parent involvement" indicates percentages of students responding "agree" or "strongly agree" to items in scale.

Experiences of Victimization and Perceptions of Safety at School, by Sexual Orientation

Disparities were clearly present between sexual orientation categories for the four measures in the school safety domain: perceptions of school safety, fear of being beaten up, experiences of harassment or bullying, and experiences of mean rumors or lies spread about them (Exhibits 9 and 10).

Perceived Safety at School. Fewer than half of bisexual and gay/lesbian students at both grade levels reported feeling safe at school, compared to 6 of every 10 straight students. Differences were greatest in middle school, where 41 percent of bisexual students and 44 percent of gay/lesbian students reported feeling safe in school, compared to 66 percent of straight students. At the high school level, students identifying their sexual orientation as "something else" were the least likely to report feeling safe at school (41%), compared to 60 percent of straight students.

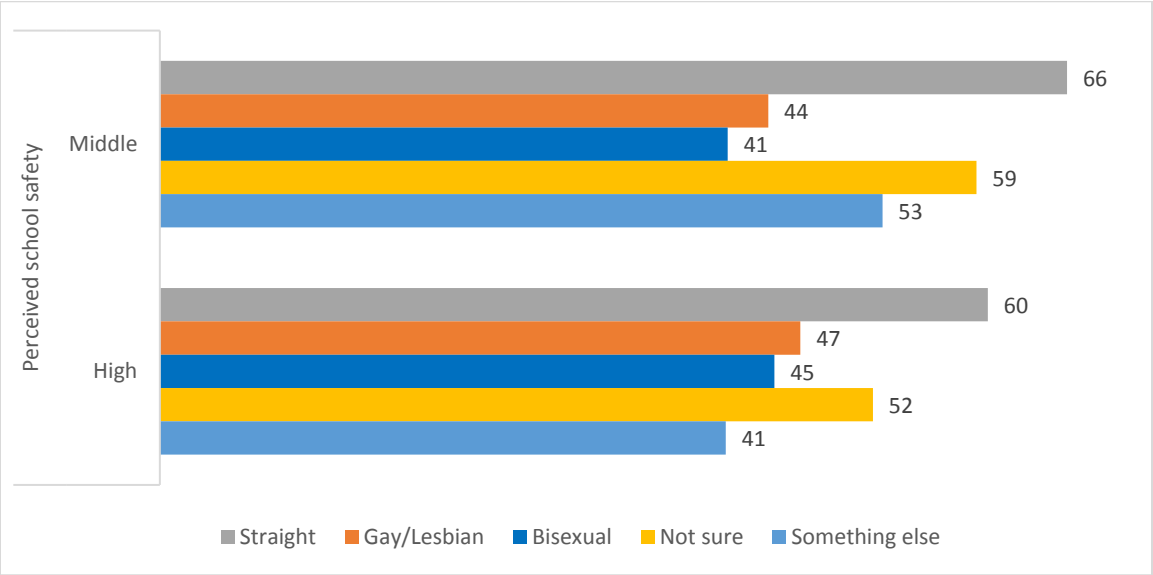
Fear of Physical Violence. Students who identified as straight were much less likely to fear being beaten up than those of other sexual orientations, in both middle school (18%) and high school (10%) (Exhibit 10). Bisexual and gay/lesbian students were at least twice as likely to report being afraid of being beaten up compared to straight students. These rates were highest among middle school students (38% for bisexual, 40% for gay/lesbian, compared to 18% for straight students). In high school, the two subgroups most likely to fear being beaten up were students who identified their sexual orientation as "something else" (25%) and those identifying as gay/lesbian (25%) (much higher than the 10% of straight students). In general, high school students were less likely to report being afraid of being beaten up compared to middle school students.

Harassment/Bullying. In both middle and high school, there were large disparities between straight students and students of other sexual orientations in terms of reported harassment and bullying (Exhibit 10). At the high school level, the rate of reported harassment and bullying was generally twice as high among gay/lesbian students (59%), bisexual students (53%), and students who identified their sexual orientation as "something else" (42%), when compared to straight students (26%). Disparities were largest among middle school students, with 70 percent of gay/lesbian students and 71 percent of bisexual students reporting harassment or bullying compared to only 32 percent of straight students. In general, middle school students of all sexual orientations reported harassment and bullying at higher rates than did students in high school.

Verbal Harassment. Bisexual students across school levels were more likely than their peers of other sexual orientations to report hearing about mean lies or rumors about themselves — 61 percent in middle school and 56 percent in high school, compared with 38 percent of straight students in middle school and 30 percent of straight students in high school (Exhibit 10). Among middle school students, those who identified as bisexual (61%) or gay/lesbian (56%) were more likely to report that mean lies and rumors were spread about them than students identifying as straight, not yet sure about their sexual orientation, or of another sexual orientation not included in the survey options ("something else"). These findings were consistent with those for high school students, among whom students who were bisexual (48%) and gay/lesbian (42%) were most likely to report that mean lies and rumors had been spread about themselves.

EXHIBIT 9.

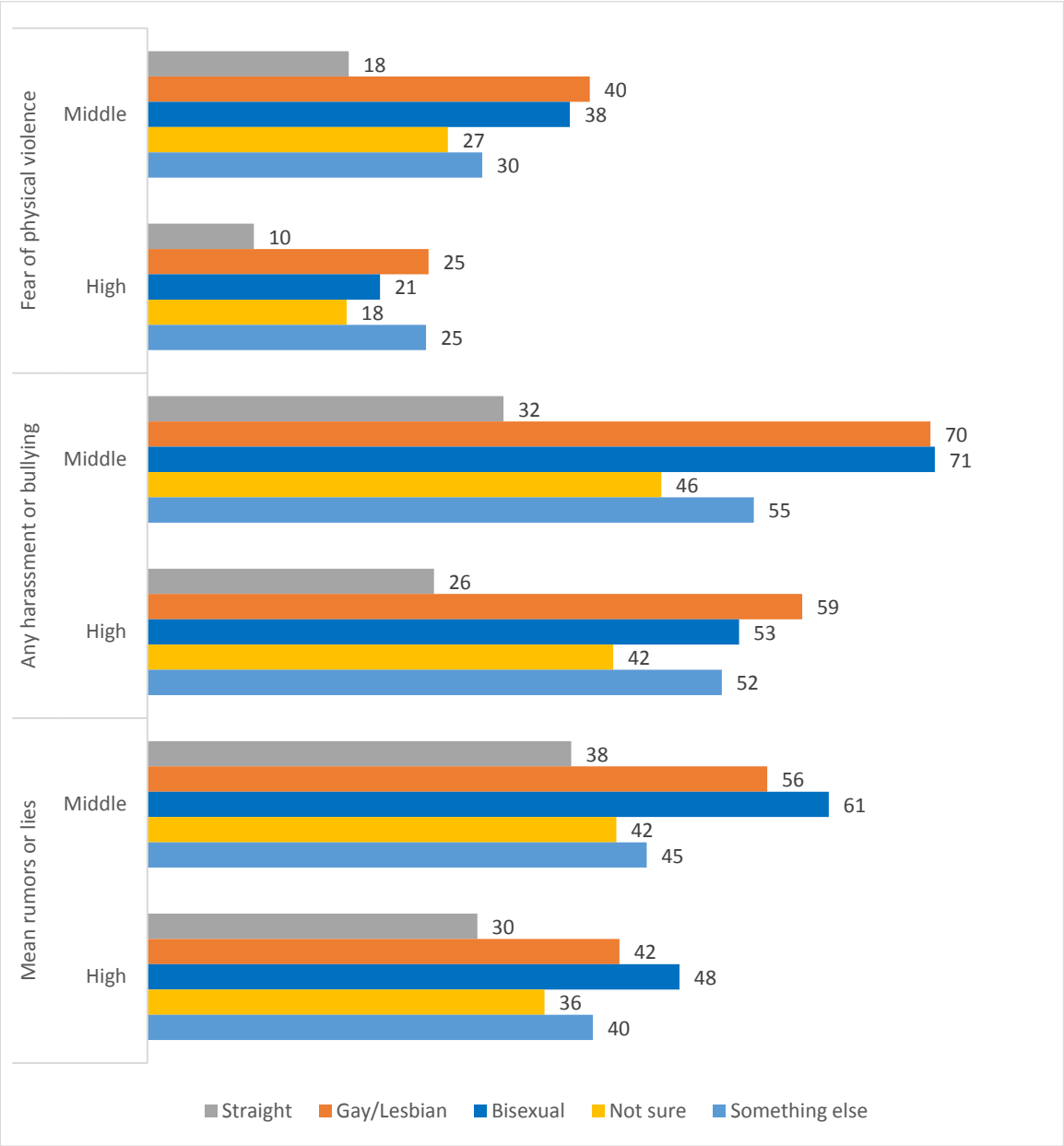
Percentage of Students Reporting Feeling Safe or Very Safe at School, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*safe*" or "*very safe*" to item.

EXHIBIT 10.

Percentage of Students Reporting Fear of Physical Violence and Victimization, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding *"1 time," "2–3 times,"* or *"4 or more times"* to item.

Mental Health, by Sexual Orientation

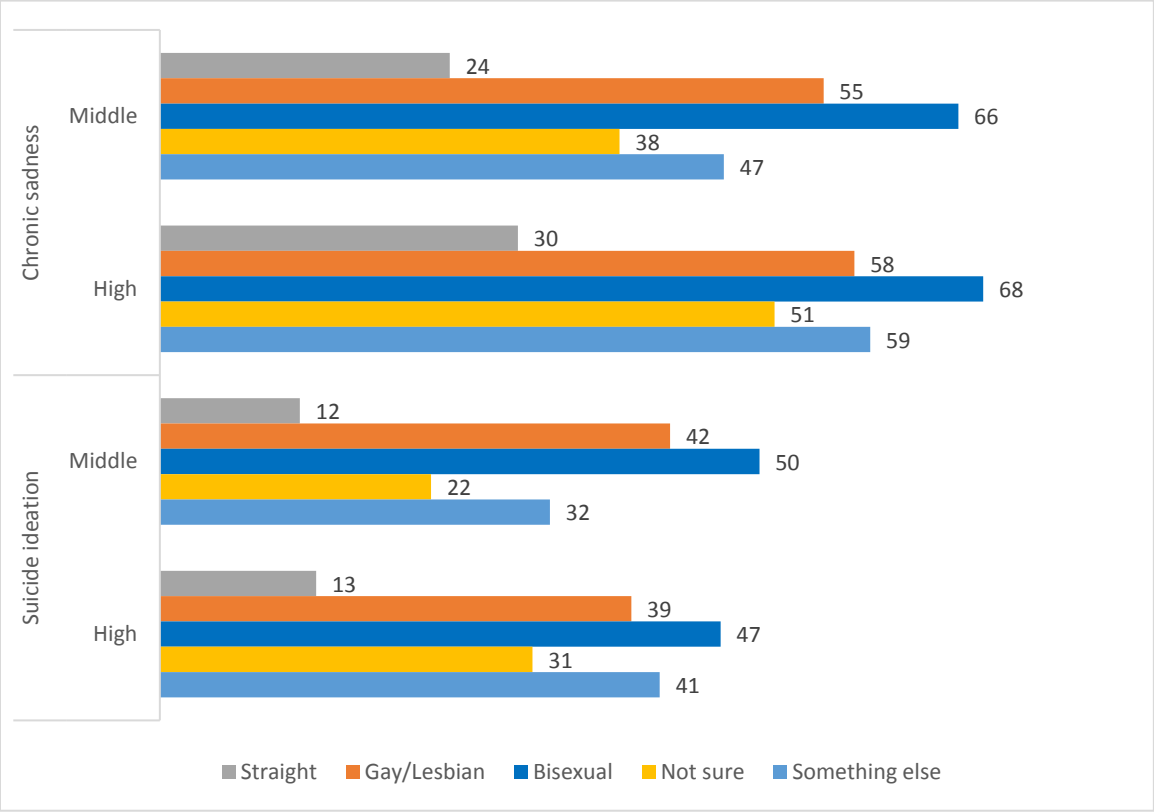
As with gender identity, the largest disparities in student responses by sexual orientation occurred within the mental health domain (Exhibit 11). Bisexual students were most likely to report both chronic sadness and suicide ideation, at rates at least twice as high as straight students in middle school and at least three times as high as straight students in high school. About two-thirds of bisexual students reported chronic sadness and about half reported suicide ideation. Across school levels, gay/lesbian students reported chronic sadness and suicide ideation at rates 8 to 11 percentage points lower than bisexual students. In high school, 58 percent of gay/lesbian students reported chronic sadness and 39 percent reported suicide ideation. In middle school, 55 percent of gay/lesbian students reported chronic sadness and 42 percent reported suicide ideation.

High school students who identified their sexual orientation as "something else" were also likely to report chronic sadness (59%) and suicide ideation (41%) at rates about two to three times higher than for straight students. Slightly smaller disparities were present among middle school students of the same subgroups on measures of chronic sadness and suicide ideation.

Students who described their sexual orientation as "not sure yet" had the smallest disparities with straight students, but their results were still significantly more negative. Compared with straight peers, students identifying as unsure about their sexual orientation were twice as likely to report considering suicide in middle school (at 32%) and three times as likely to report suicide ideation in high school (at 41%).

EXHIBIT 11.

Percentage of Students Reporting Poor Mental Health, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*yes*" to item.

School Engagement, by Sexual Orientation

Disparities between students of different sexual orientations were smaller in the school engagement domain, but still substantial. These differences were largest on measures of academic motivation and school connectedness. Straight students, followed by students who were "not sure yet" about their sexual orientation, were the most likely to report being academically motivated and connected to school. Students in these subgroups were also least likely to report having missed school in the previous 30 days (Exhibits 12 and 13).

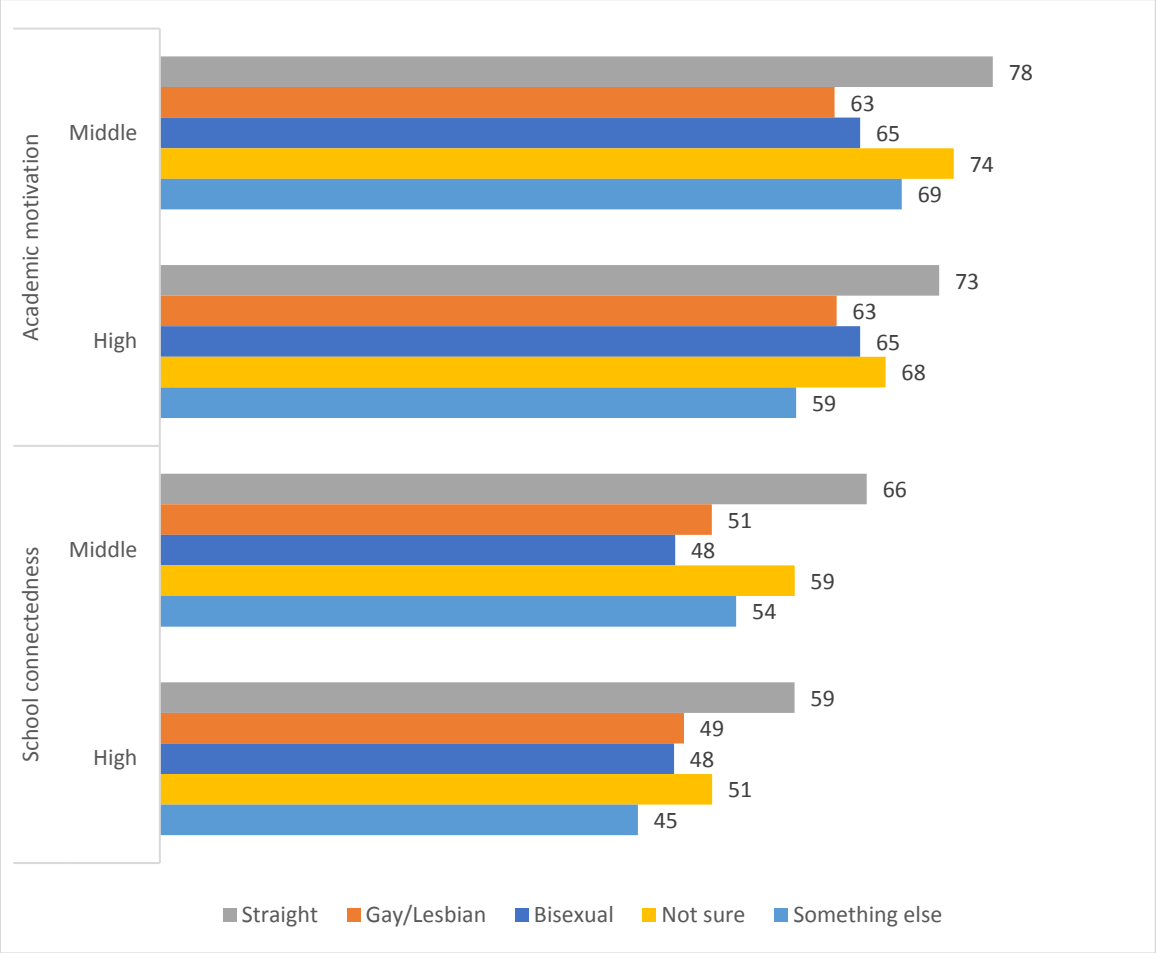
At both school levels, straight students were more likely than gay/lesbian and bisexual students to report a high level of academic motivation and school connectedness, with the greatest differences in middle school (13 to 15 percentage points). Gay/lesbian and bisexual students were also more likely than their straight peers to report having missed school, by 7 to 8 percentage points, in both middle and high school.

In general, students who indicated that they were "not sure yet" about their sexual orientation were more likely to report a high level of academic motivation and school connectedness than their gay/lesbian and bisexual peers, but less likely than their straight peers. Students unsure of their sexual orientation were equally as likely as their straight peers to report having missed school and only slightly less likely to report a

high level of academic motivation. However, responses by straight students were much more likely to indicate school connectedness than those for students of any other sexual orientation subgroup, at rates 7 to 15 percentage points higher.

EXHIBIT 12.

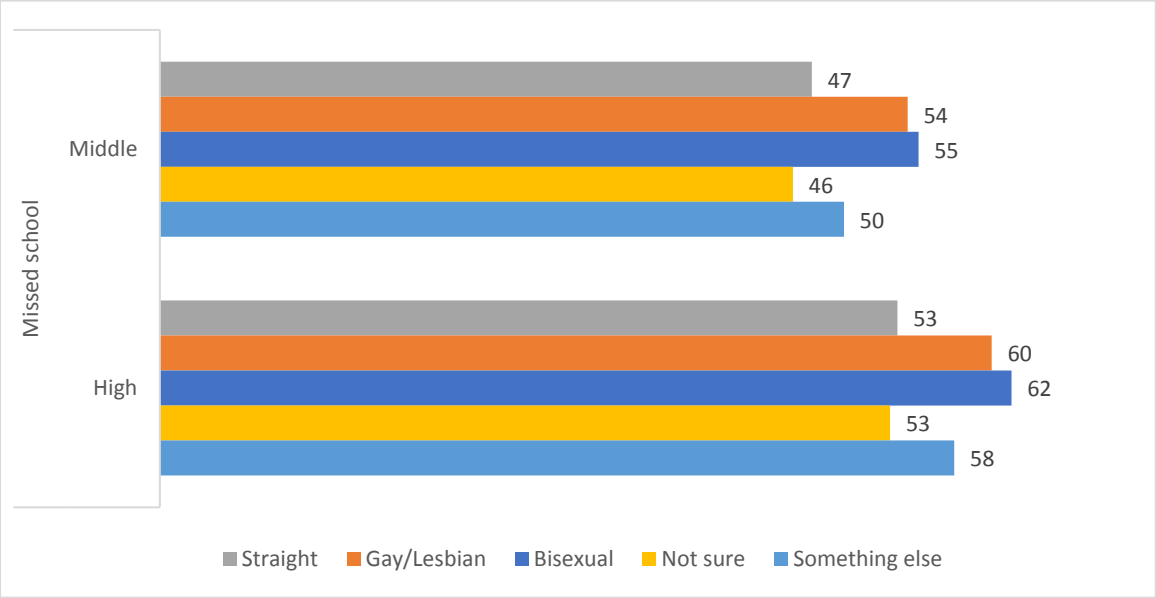
Percentage of Students Reporting Academic Motivation and School Connectedness, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*agree*" or "*strongly agree*" to items in scale.

EXHIBIT 13.

Percentage of Students Reporting Having Missed School, by Sexual Orientation and School Level



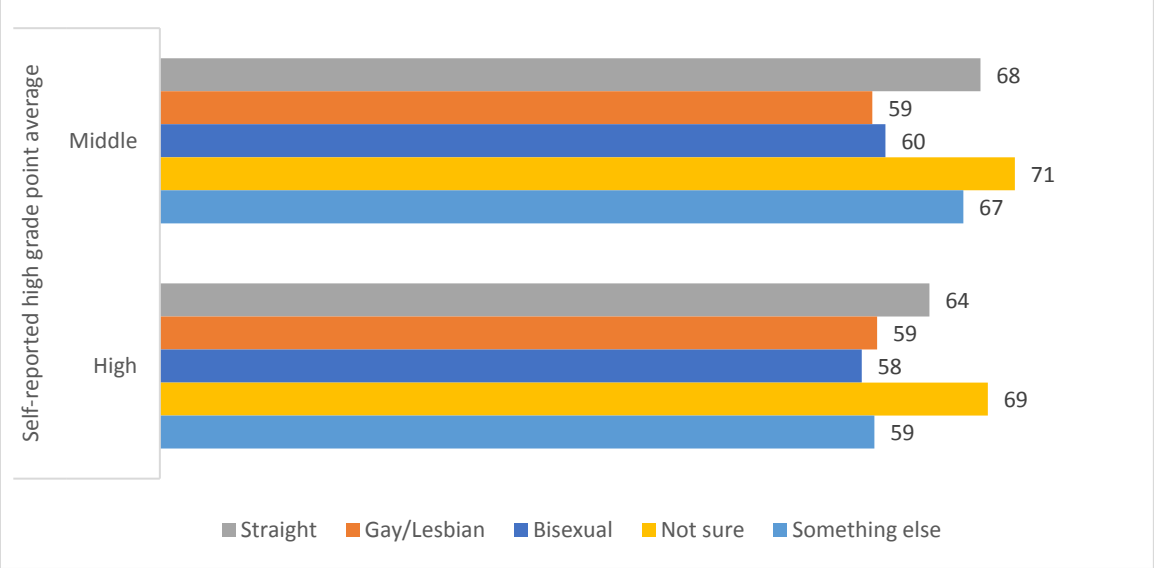
Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "1 day," "2 days," or "3 or more days" to item.

Academic Performance, by Sexual Orientation

Although there were slight disparities between students of different sexual orientations in terms of their self-reported grade point average (GPA), the majority of students in each sexual orientation subgroup across school levels reported having a high GPA, meaning mostly Bs and above (Exhibit 14). Those who were "not sure yet" of their sexual orientation were most likely to report having a high GPA (71% in middle school, 69% in high school), followed by straight students (68% in middle school, 64% in high school). Compared to straight students, students who identified as gay/lesbian or bisexual were 8 to 9 percentage points less likely in middle school and 5 to 6 percentage points less likely in high school to report a high GPA. Results for students who identified their sexual orientation as "something else" were similar to those for straight students in middle school and similar to those for students who identified as gay/lesbian or bisexual in high school.

EXHIBIT 14.

Percentage of Students Reporting a High Grade Point Average, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "mostly Bs," "mostly As or Bs," or "mostly As" to item.

The extent to which school supports and safety can account for poorer outcomes for LGBTQ students compared to non-LGBTQ students

This section delves further into the disparities detailed in the previous section by presenting results from an analysis of the extent to which the differences in reported school supports and school safety can account for the disparities in how LGBTQ and non-LGBTQ students describe their mental health, school engagement, and academic performance. The results show a reduction in disparities by gender identity and sexual orientation after adjusting for differences in the four school support and four school safety measures (adjusted results). Differences between the adjusted results and the unadjusted results represent the extent to which school supports and school safety can account for mental health, school engagement, and academic performance disparities between LGBTQ and non-LGBTQ students. The adjusted differences in LGBTQ and non-LGBTQ students' reported mental health, school engagement, and academic performance represent the disparities that would exist if LGBTQ students perceived their schools to be equally as safe as non-LGBTQ students perceived their schools to be, including exposing them to the same levels of violence and harassment, and if LGBTQ students reported being supported by teachers and peers to the same extent as non-LGBTQ students. Differences in the adjusted and unadjusted results reflect the potential impact of increasing efforts to promote school supports and improve safety for LGBTQ students. As this analysis shows, such changes could be expected to reduce disparities between LGBTQ and straight or non-transgender students in reported mental health, school engagement, and academic performance. However, the adjusted results only account for *current* disparities in perceived school supports and safety. They do not adjust for exposure to fear of physical violence, victimization, and low levels of support in prior years.

Moreover, the adjusted results are based on a model that assumes that the presence of school supports and experiences of school safety affect mental health, school engagement, and academic performance, but not vice versa. The extent to which school supports and safety account for disparities in mental health, student engagement, and academic performance may be overestimated if LGBTQ students receive fewer supports from adults and peers and feel less safe at school *because* they have poorer psychological and academic outcomes (reverse causality).

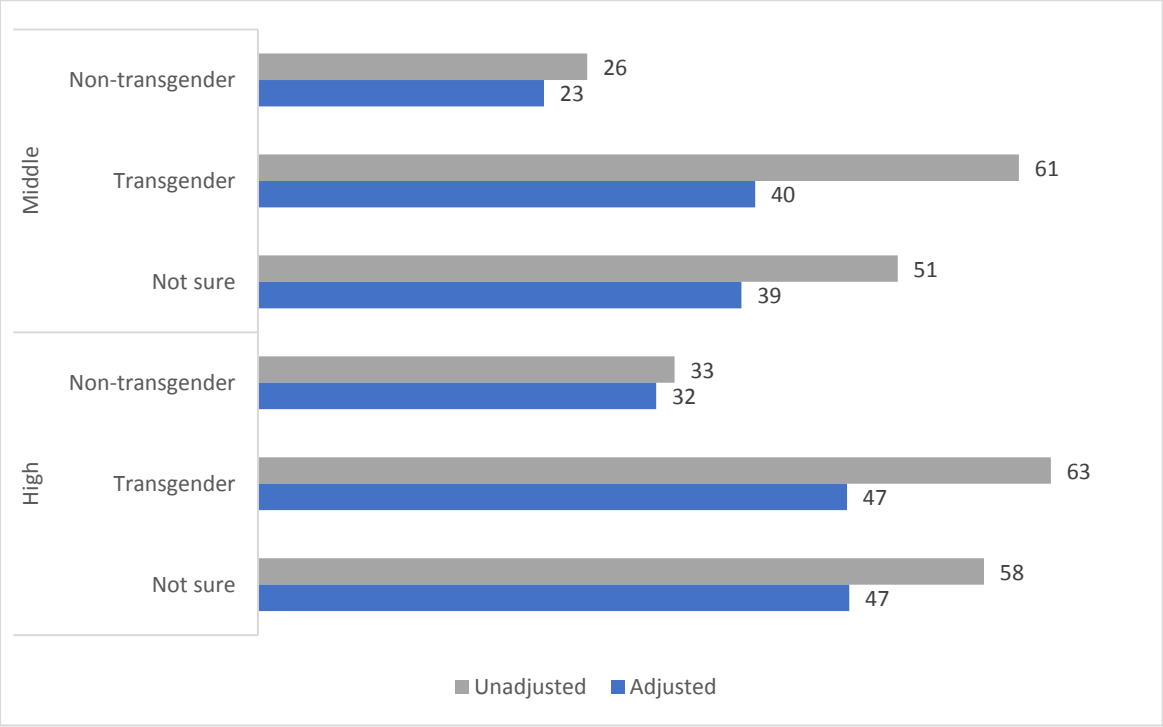
Mental Health, by Gender Identity

Chronic Sadness

Exhibit 15 shows unadjusted (blue bar) and adjusted (gray bar) results for chronic sadness. The unadjusted results for middle school students indicate that 61 percent of transgender students reported experiencing chronic sadness, compared to 26 percent of non-transgender students, a difference of 35 percentage points. After accounting for perceived school supports and school safety, this difference is reduced to 17 percentage points (40% versus 23%). This finding suggests that if transgender and non-transgender students perceived equal levels of school supports and safety, disparities in reported chronic sadness would decline by more than half. Similarly, disparities between non-transgender students and students who were "not sure" about their gender identity are reduced by 10 percentage points after accounting for differences in perceived school supports and safety. Results are similar in high school. The results suggest that schools could significantly reduce the prevalence of chronic sadness among transgender students and students who are not sure if they are transgender by improving these students' sense of school safety and school supports.

EXHIBIT 15.

Adjusted and Unadjusted Percentages of Students Reporting Chronic Sadness, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*yes*" to item.

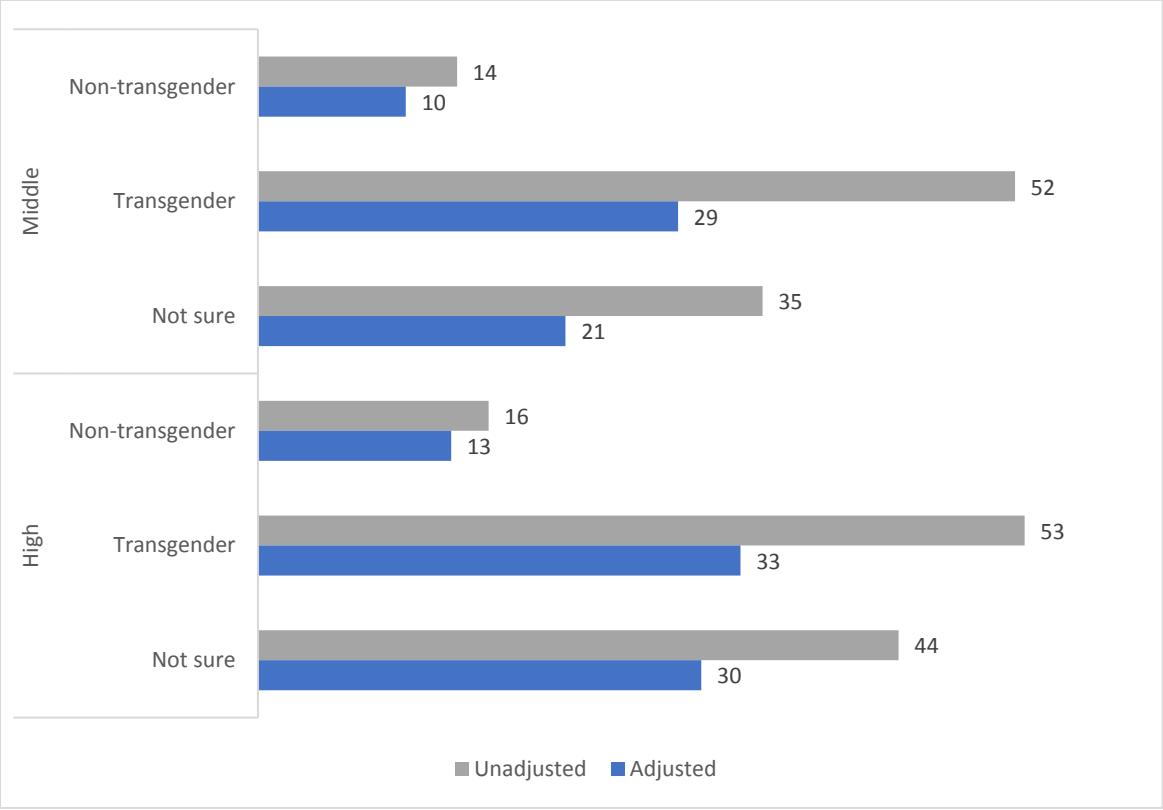
Suicide Ideation

School supports and school safety account for a large proportion of the disparities in suicide ideation across all gender identity groups (Exhibit 16).

- In both middle and high schools, more than half of transgender students reported contemplating suicide, compared to about 15 percent of non-transgender students, a sizable difference.
- Students' perceptions and experiences of school supports and school safety account for about 50 percent of this difference. After adjusting for these factors, rates of suicide ideation among transgender middle and high school students drop to approximately 30 percent, which is still almost 20 percentage points higher than the rates for non-transgender students.
- Similar results are evident for students who were "not sure" if they were transgender.

EXHIBIT 16.

Adjusted and Unadjusted Percentages of Students Reporting Suicide Ideation, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*yes*" to item.

School Engagement, by Gender Identity

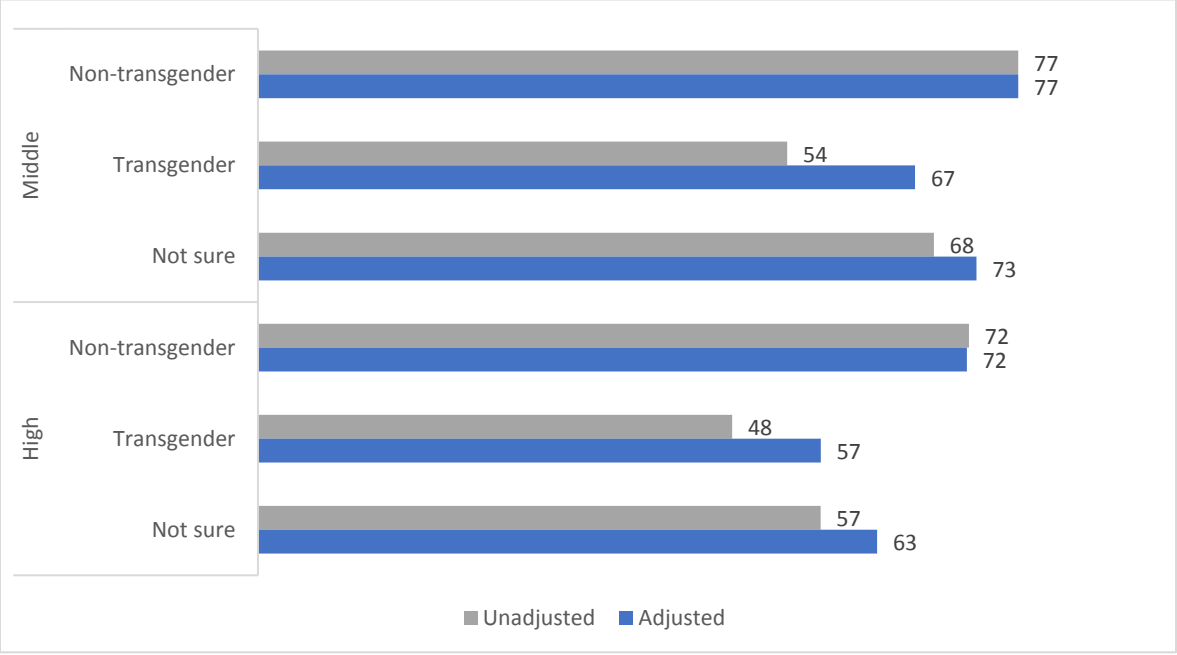
Academic Motivation

Students' perceptions of school supports and safety account for a greater proportion of the transgender and non-transgender disparities in academic motivation at the middle school level than at the high school level (Exhibit 17).

- Before adjusting for school supports and safety, 77 percent of non-transgender students in middle school reported high levels of academic motivation compared to 54 percent of transgender students, a disparity of 23 percentage points.
- After adjusting for school supports and school safety, the difference between rates of transgender and non-transgender middle school students reporting academic motivation is reduced to 10 percentage points (77% of non-transgender students versus 67% of transgender students).
- At the high school level, school supports and safety account for only about one-third of the difference in academic motivation between non-transgender and transgender students (unadjusted 72% versus 48%, respectively, compared to adjusted 72% versus 57%, respectively).

EXHIBIT 17.

Adjusted and Unadjusted Percentages of Students Reporting Academic Motivation, by Gender Identity and School Level



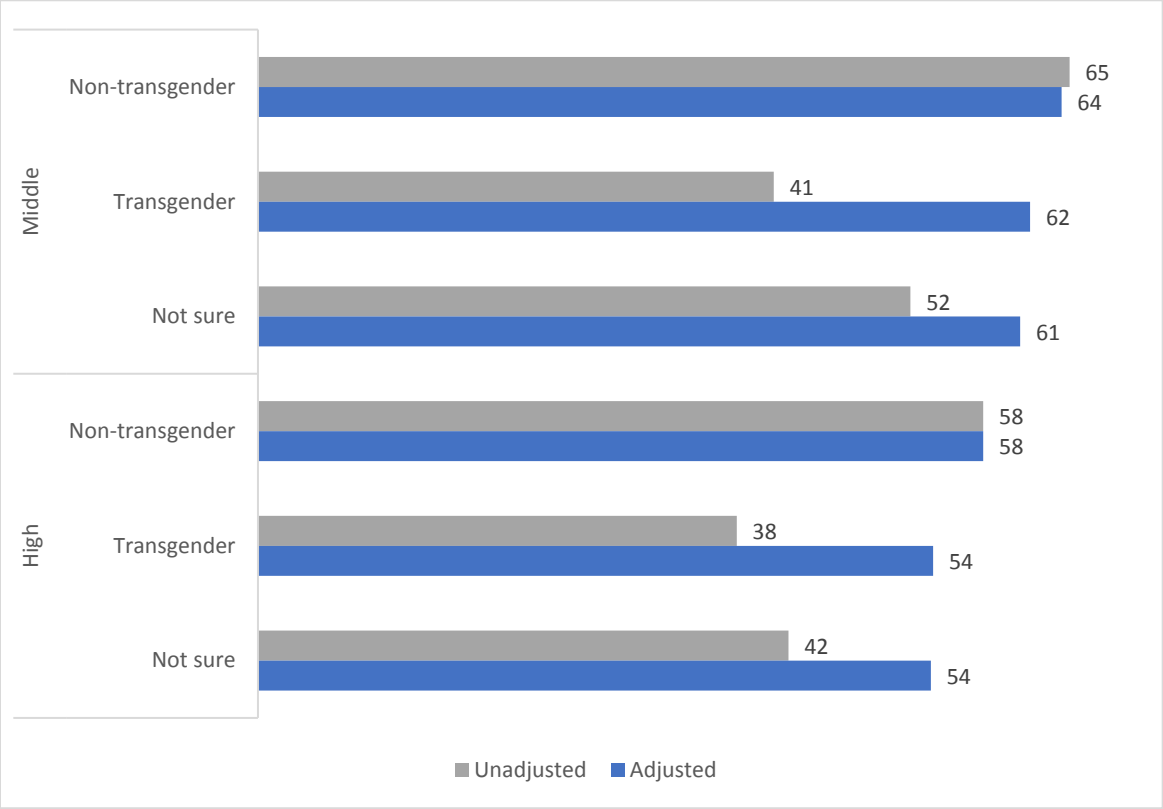
Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*agree*" or "*strongly agree*" to items in scale.

School Connectedness

School supports and safety almost completely account for school connectedness disparities across gender identity groups. By controlling for students' experiences of support and safety in school, differences across gender identity subgroups in school connectedness are reduced from a maximum of 24 percentage points to a maximum of 5 percentage points (Exhibit 18).

EXHIBIT 18.

Adjusted and Unadjusted Percentages of Students Reporting School Connectedness, by Gender Identity and School Level



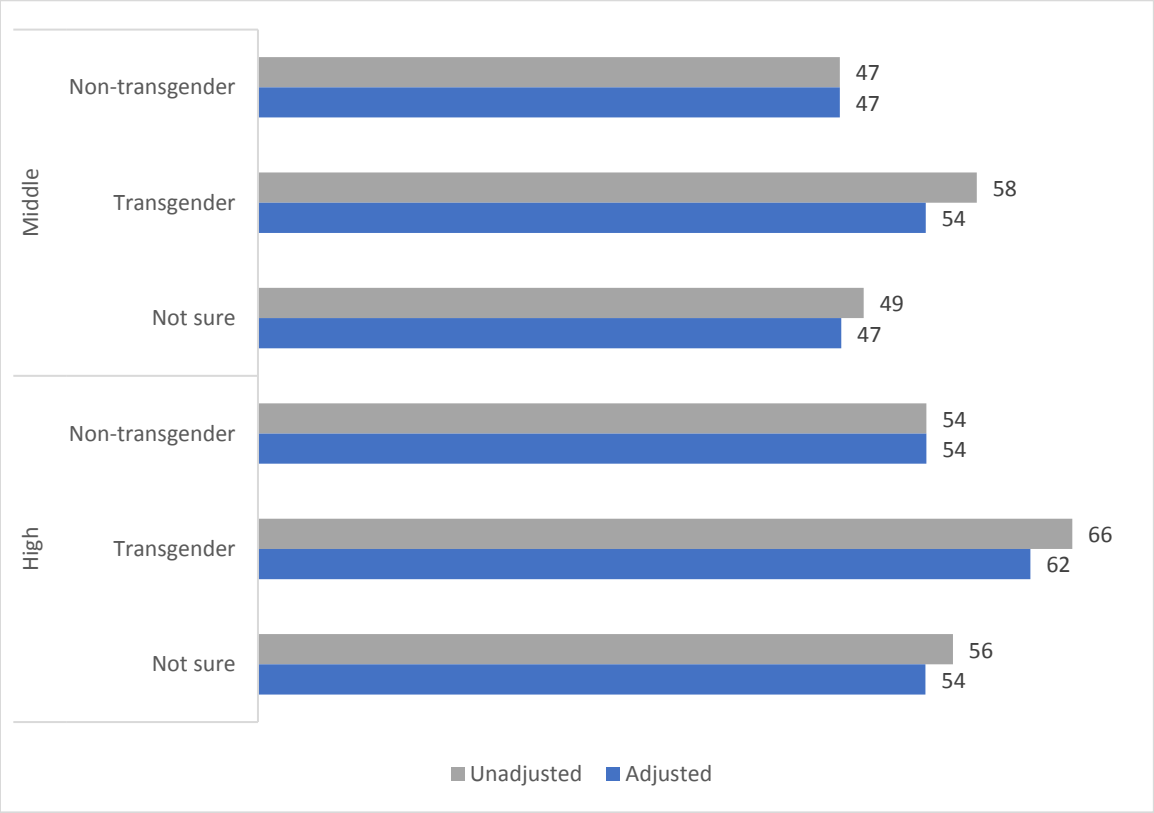
Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*agree*" or "*strongly agree*" to items in scale.

Missed School

Before accounting for perceived school supports and school safety, transgender students in middle and high school were 9 and 12 percentage points, respectively, more likely to indicate that they had missed school than non-transgender students. Perceived school supports and safety account for about one-quarter of these differences. Differences in reported school absences between non-transgender students and those who were "not sure" about their gender identity were small (Exhibit 19).

EXHIBIT 19.

Adjusted and Unadjusted Percentages of Students Reporting Having Missed School in the Past 30 Days, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*1 day*," "*2 days*," or "*3 or more days*" to item.

Academic Performance, by Gender Identity

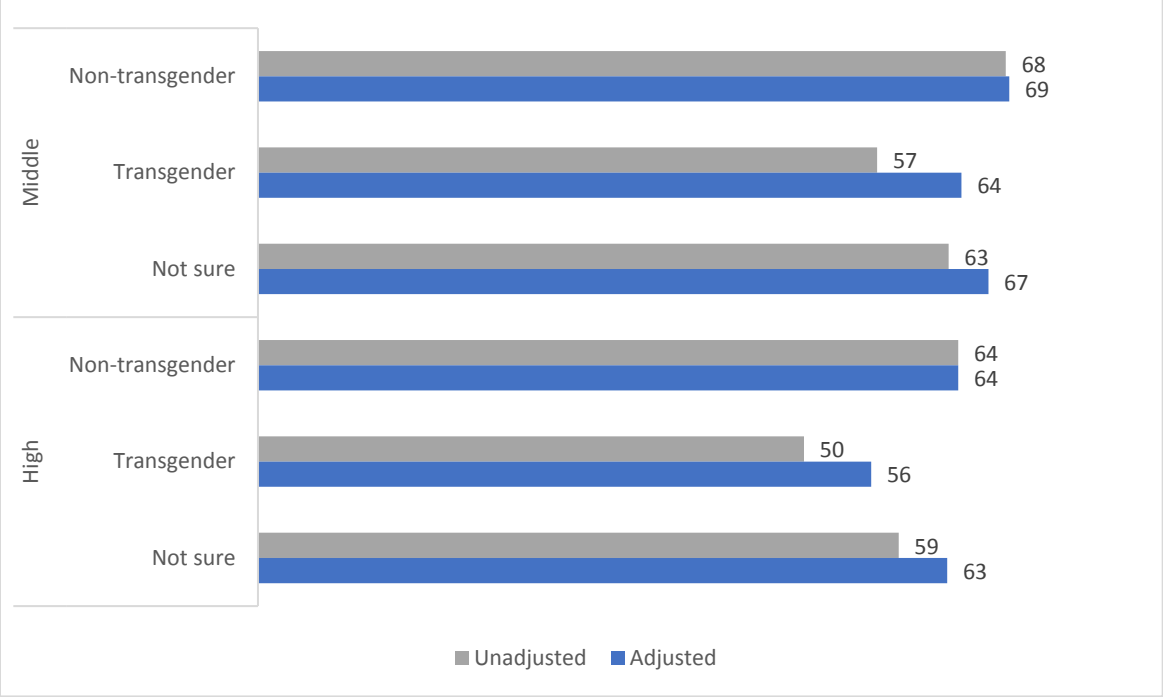
Self-Reported Grade Point Average

In both middle and high school, students' perceptions and experiences of school supports and safety account for 40 to 60 percent of the differences in self-reported grades earned across gender identity groups (Exhibit 20).

- In middle schools, accounting for the presence of school supports and for school safety reduces the difference between the percentages of transgender and non-transgender students who reported earning a high grade point average (GPA) from 11 percentage points (57% for transgender versus 68% for non-transgender) to 5 percentage points (64% versus 69%).
- In high schools this adjustment reduces the disparity from 14 percentage points (50% for transgender versus 64% for non-transgender students) to 8 percentage points (56% versus 64%).
- Accounting for the presence of school supports and for school safety eliminates the small difference between the rates of self-reported high GPA for non-transgender students and students "not sure" if they were transgender.

EXHIBIT 20.

Adjusted and Unadjusted Percentages of Students Reporting High Grade Point Average, by Gender Identity and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "mostly Bs," "mostly As or Bs," or "mostly As" to item.

Mental Health, by Sexual Orientation

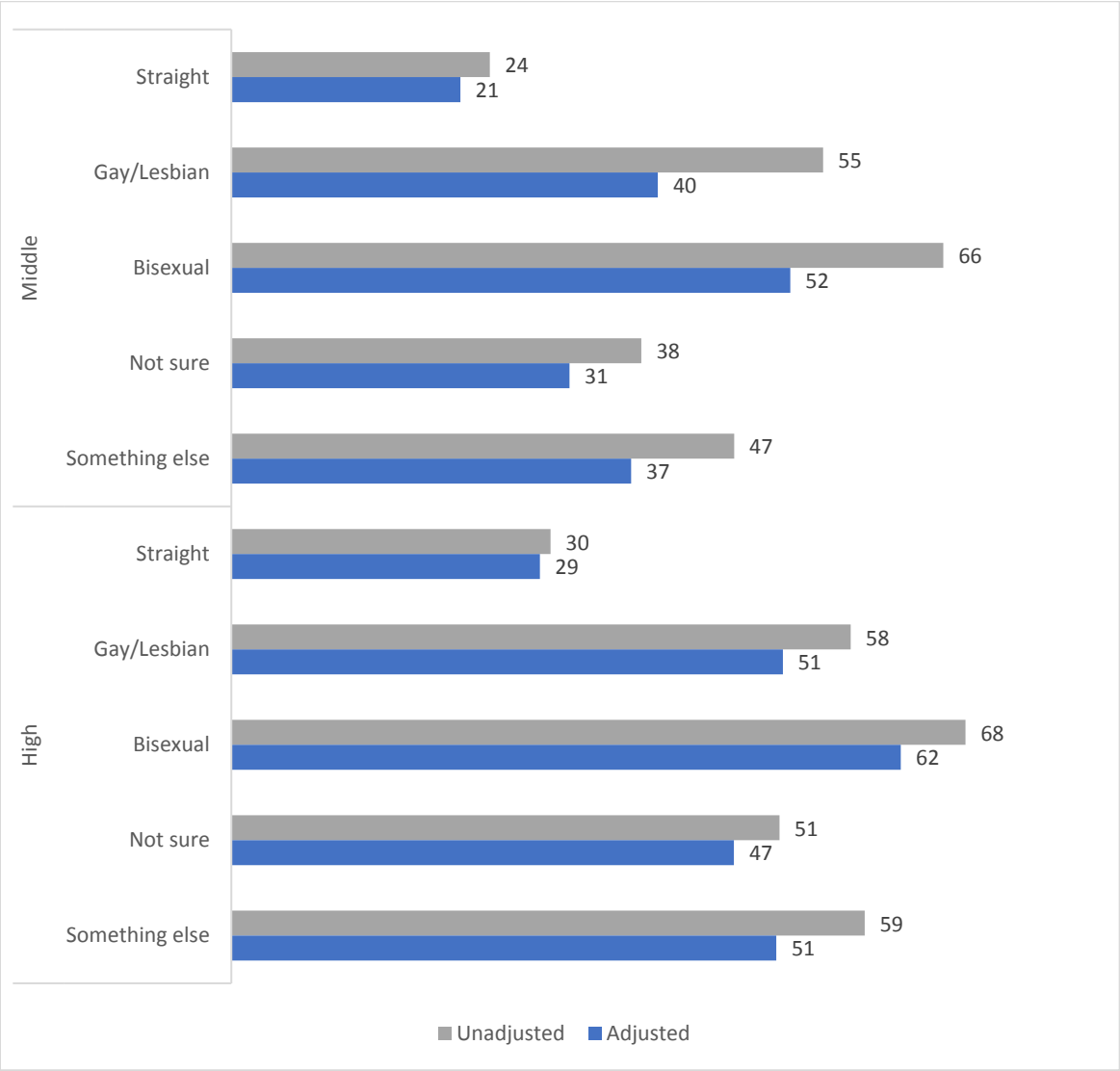
Chronic Sadness

School supports and school safety account for a greater proportion of the disparities in chronic sadness across sexual orientation groups at the middle school level than at the high school level (Exhibit 21). In middle school, differences in chronic sadness between straight and non-straight subgroups are reduced by 31 percentage points and 48 percentage points after controlling for perceived school supports and safety:

- Accounting for perceived school supports and safety reduces the difference between straight students' and gay/lesbian students' reporting of chronic sadness from 31 percentage points (24% of straight students versus 55% of gay/lesbian students) to 19 percentage points (21% versus 40%) in middle school.
- The group with the highest rate of chronic sadness was bisexual middle school students. After controlling for school supports and safety, the disparity between bisexual and straight students is reduced from 42 percentage points (66% of bisexual students versus 24% of straight students) to 31 percentage points (52% versus 21%).
- In high schools, the highest percentage-point reduction in chronic sadness across all sexual orientation subgroups was for gay/lesbian students, which reduces from a difference of 28 percentage points (unadjusted 58% for gay/lesbian students versus 30% for straight students) to a difference of 22 percentage points (adjusted 51% versus 29%).

EXHIBIT 21.

Adjusted and Unadjusted Percentages of Students Reporting Chronic Sadness, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*yes*" to item.

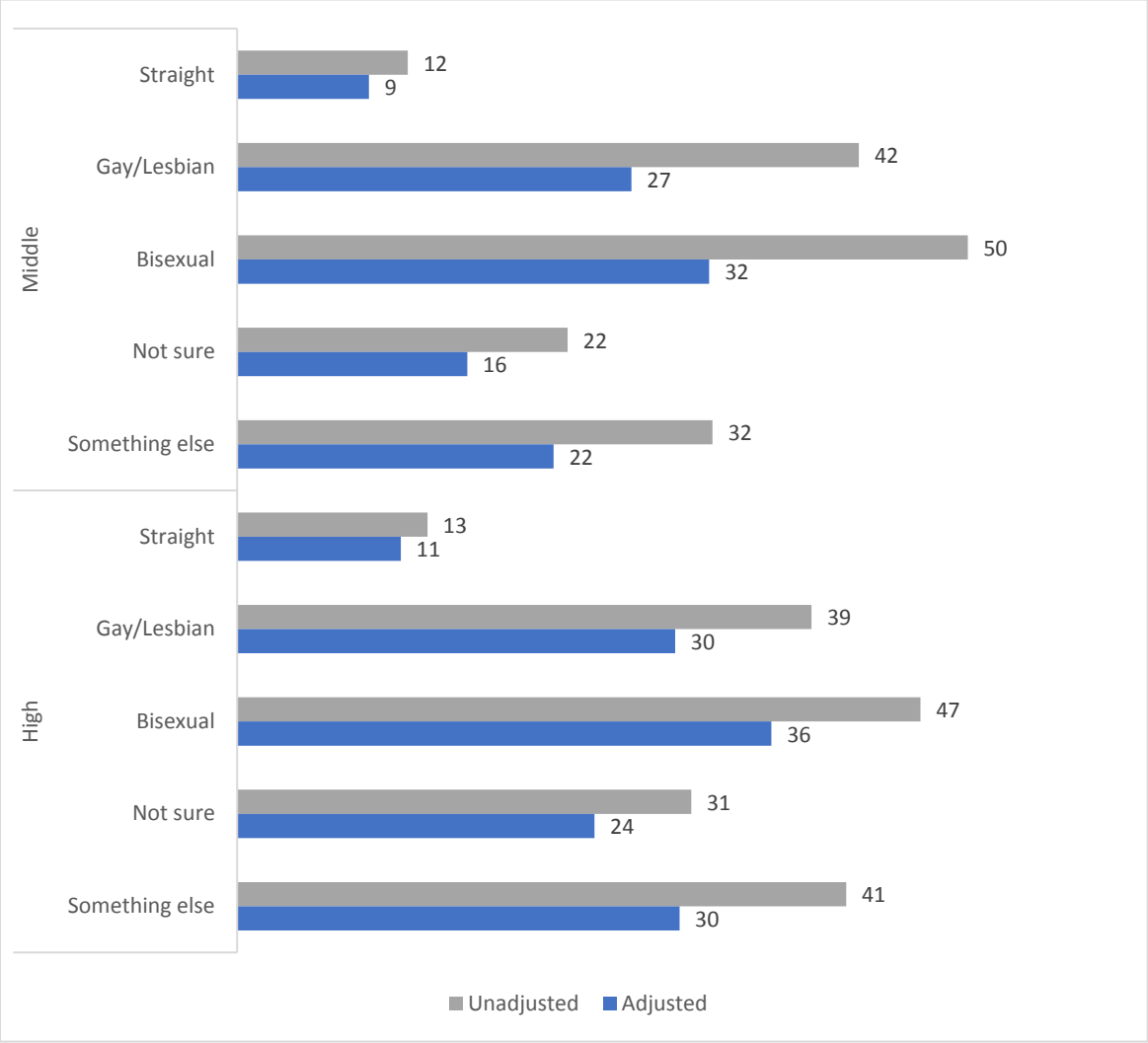
Suicide Ideation

Similar to the results for chronic sadness, reported school supports and safety account for a greater proportion of the disparities across sexual orientation subgroups at the middle school level than at the high school level. School supports and safety account for between 40 percent and 47 percent of the disparities between straight and non-straight groups in middle schools, and between 28 percent and 38 percent in high schools (Exhibit 22).

- Among middle school students, the difference between unadjusted and adjusted percentages of students reporting suicide ideation was greatest for bisexual students (a decrease of 18 percentage points), followed by gay/lesbian students (a decrease of 15 percentage points), and then those who identified their sexual orientation as "something else" (a decrease of 6 percentage points).
- For high school students, school supports and safety account for less of the sexual orientation disparities in suicide ideation, but the difference between unadjusted and adjusted rates is about 11 percentage points for students who identified as bisexual, or "something else."

EXHIBIT 22.

Adjusted and Unadjusted Percentages of Students Reporting Suicide Ideation, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*yes*" to item.

School Engagement, by Sexual Orientation

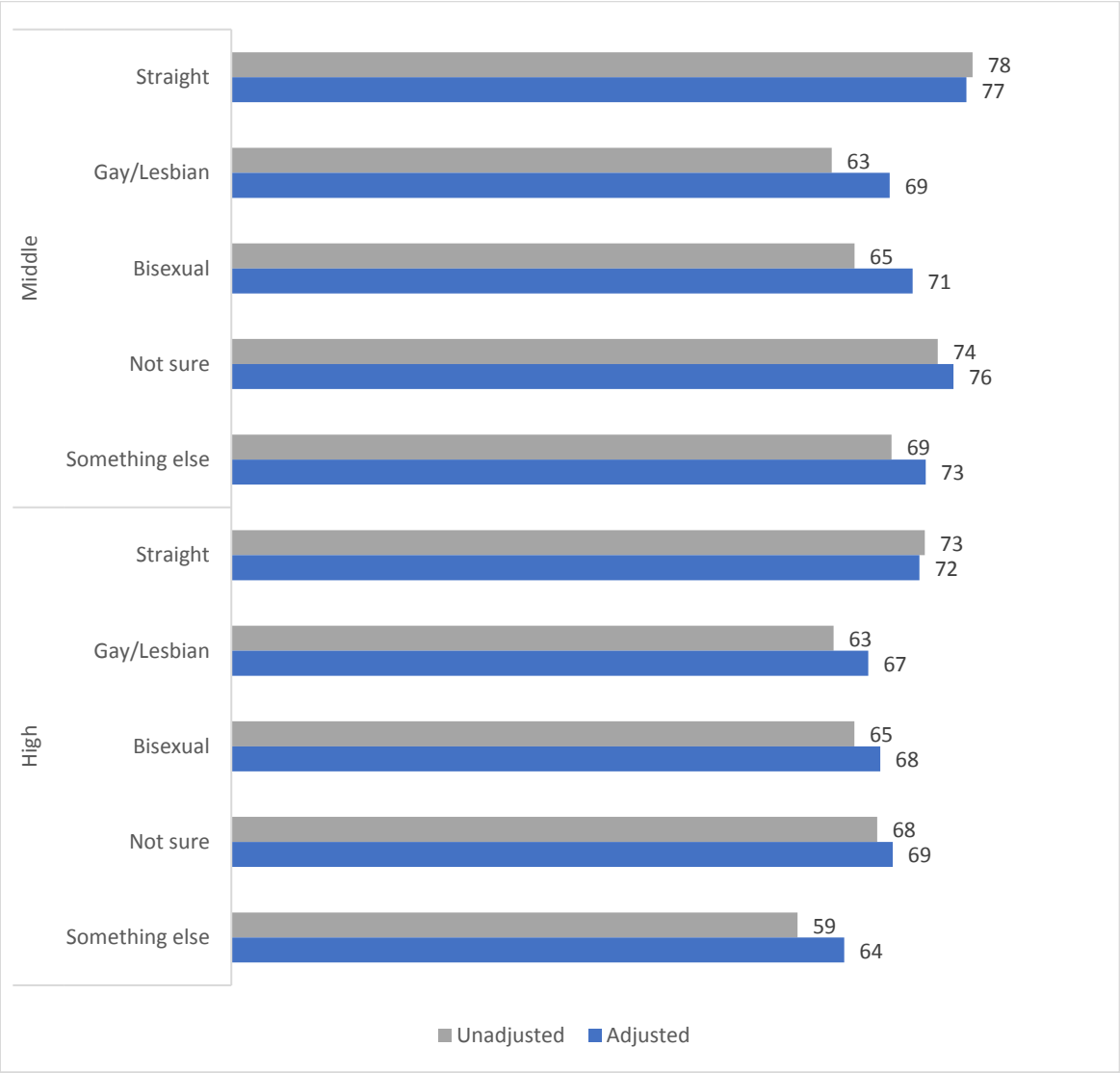
Academic Motivation

Perceived school supports and safety account for a substantial percentage of the disparities in academic motivation across sexual orientation groups in both middle and high school (Exhibit 23).

- At the middle school level, the difference in academic motivation between straight and gay/lesbian students is reduced from 15 percentage points (78% for straight students versus 63% for gay/lesbian students) to 8 percentage points (77% versus 69%) after accounting for differences in perceived school supports and safety. At the high school level, the reduction is from 10 percentage points (73% versus 63%) to 5 percentage points (72% versus 67%).
- At the middle school level, the disparity in the rate of high academic motivation between straight and bisexual students is reduced from 13 percentage points (78% for straight students versus 65% for bisexual students) to 6 percentage points (77% versus 71%). At the high school level, the disparity is reduced from 8 percentage points (73% versus 65%) to 4 percentage points (72% versus 68%).
- High school students who self-identified as "something else" appeared to be at considerable risk of low academic motivation, although perceived school supports and safety account for some of this risk. The academic motivation difference between these students and straight students is reduced from 14 percentage points (59% for students who described their sexual orientation as "something else" versus 73% for straight students) to 8 percentage points (64% versus 72%).

EXHIBIT 23.

Adjusted and Unadjusted Percentages of Students Reporting High Level of Academic Motivation, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*agree*" or "*strongly agree*" to items in scale.

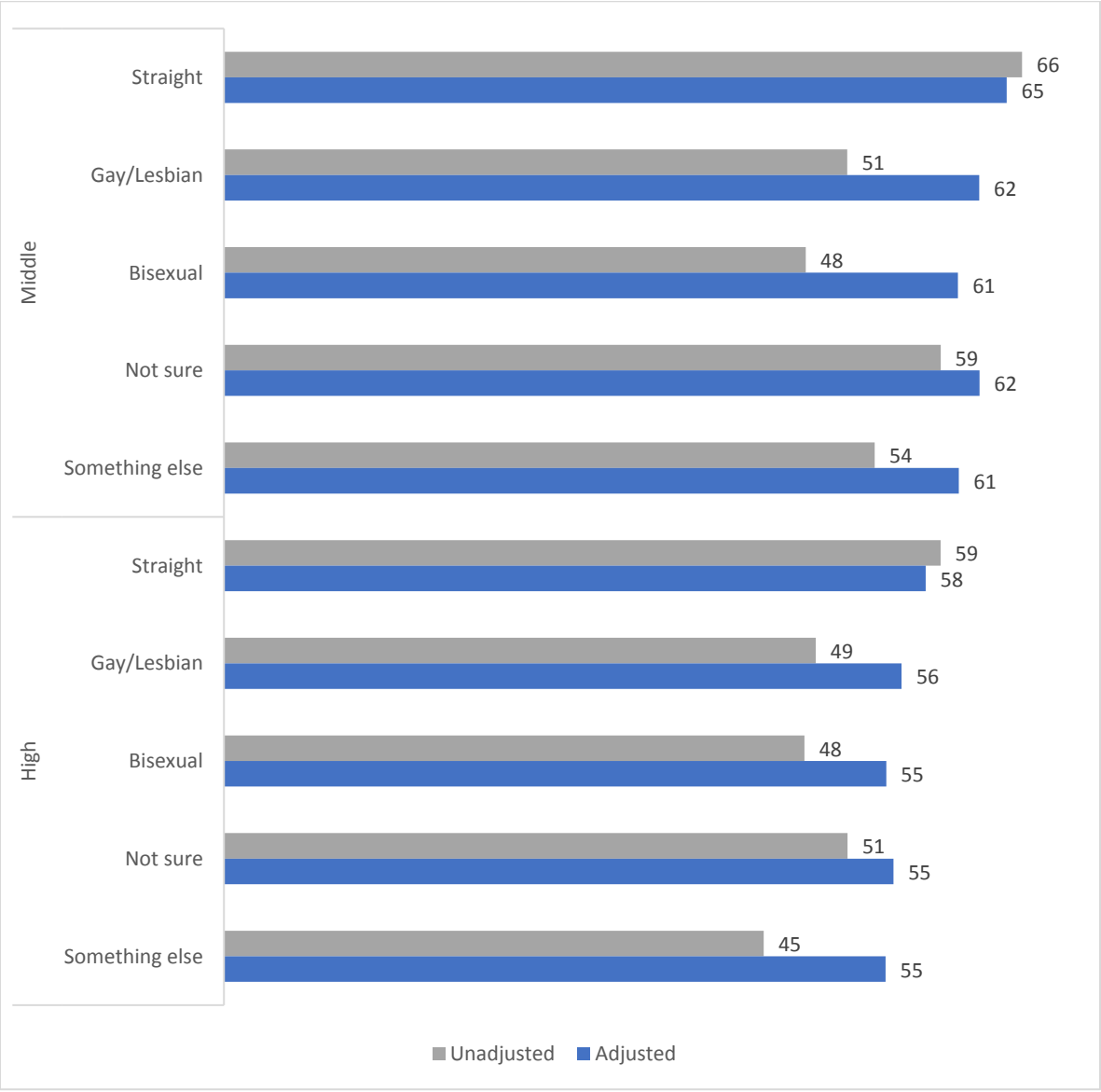
School Connectedness

School supports and safety account for almost all of the disparities in school connectedness across sexual orientation groups in both middle and high school (Exhibit 24).

- At the middle school level, the difference in school connectedness between straight and gay/lesbian students declines from 15 percentage points (66% for straight students versus 51% for gay/lesbian students) to 3 percentage points (65% versus 62%) after accounting for differences in perceived school supports and safety.
- At the high school level, the reduction is from 10 percentage points (59% versus 49%) to 2 percentage points (58% versus 56%).
- Similar declines in school connectedness disparities across other sexual orientation groups are apparent after accounting for differences in school supports and safety.

EXHIBIT 24.

Adjusted and Unadjusted Percentages of Students Reporting High Level of School Connectedness, by Sexual Orientation and School Level



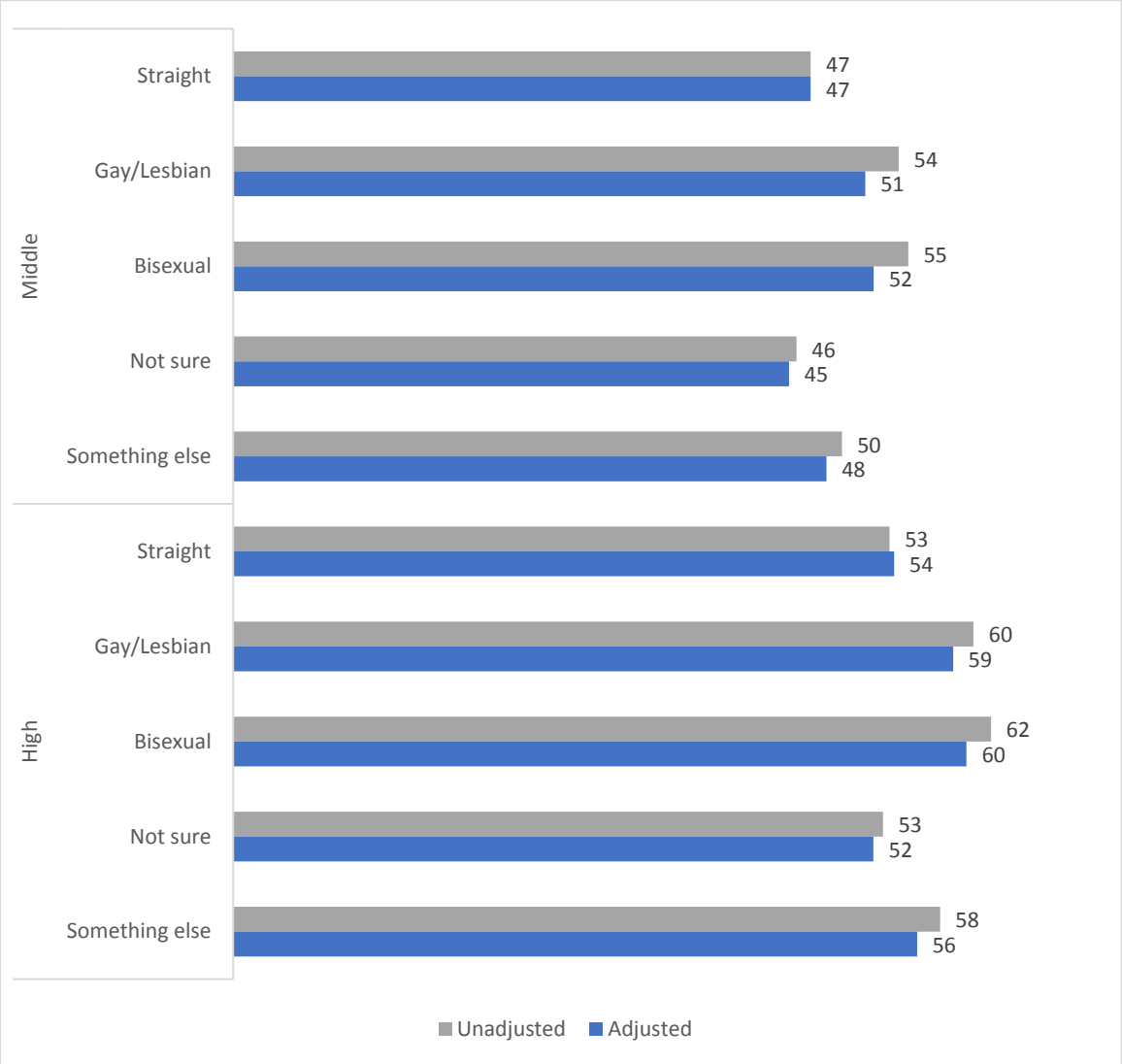
Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*agree*" or "*strongly agree*" to items in scale.

Missed School

Among both middle and high school students, those who identified as bisexual or gay/lesbian were more likely to report having missed school than peers of other sexual orientations. For all sexual orientations, across both grade levels, the differences were small between unadjusted and adjusted percentages of students reporting having missed school (Exhibit 25). Perceived school safety and supports account for a small percentage of the disparities in reported school absences across sexual orientation groups.

EXHIBIT 25.

Adjusted and Unadjusted Percentages of Students Reporting Having Missed School in the Past 30 Days, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "*1 day*," "*2 days*," or "*3 or more days*" to item.

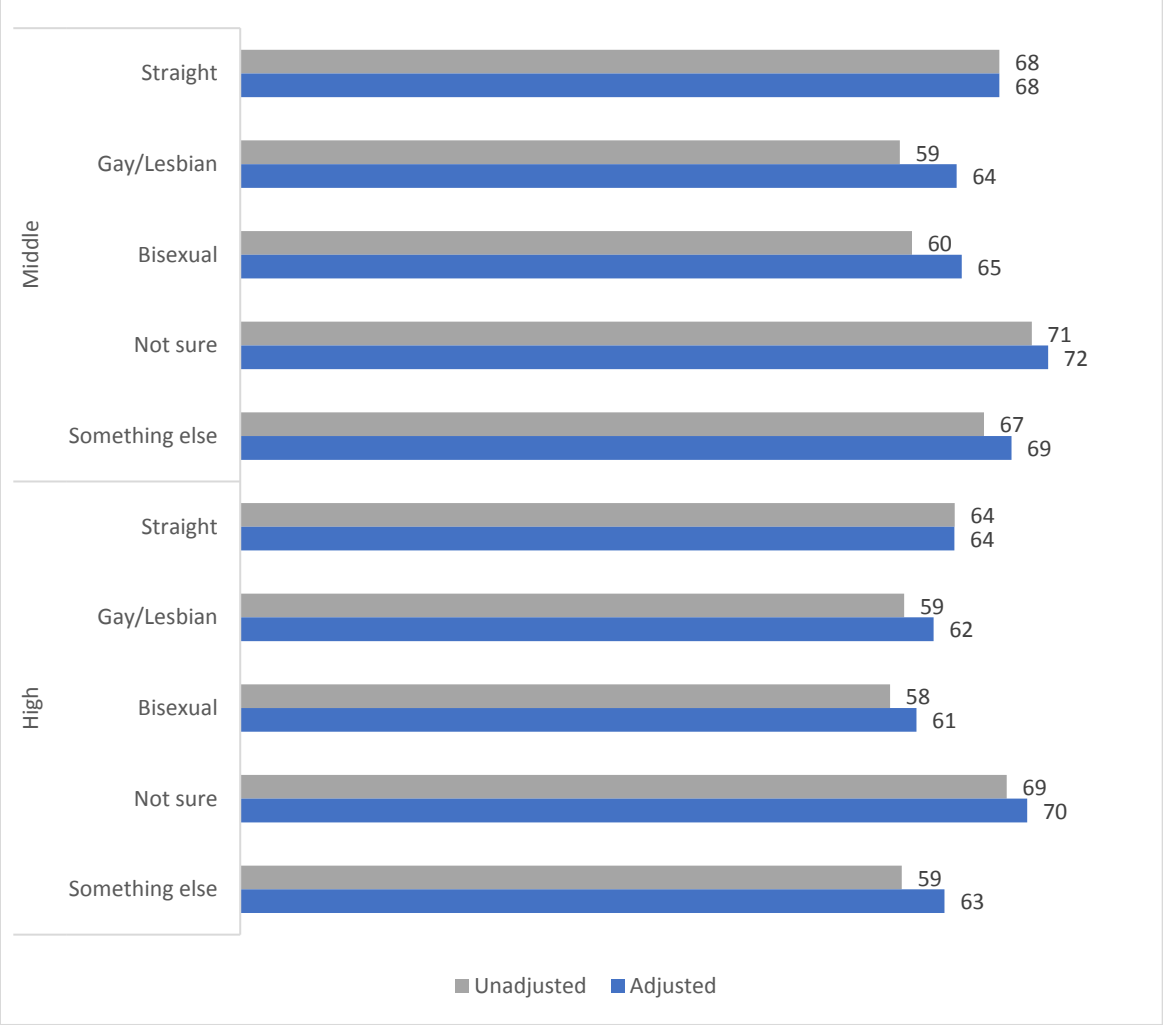
Academic Performance, by Sexual Orientation

Self-Reported Grade Point Average

The unadjusted results show that gay/lesbian and bisexual students were likely to report high GPAs at rates 8 to 9 percentage points lower than straight students at the middle school level, and 5 to 6 percentage points lower than straight students at the high school level. Differences in perceived school supports and safety account for 40 to 60 percent of these disparities (Exhibit 26). After controlling for school supports and safety, there are only slight disparities in self-reported GPAs across sexual orientation groups.

EXHIBIT 26.

Adjusted and Unadjusted Percentages of Students Self-Reporting High Grade Point Average, by Sexual Orientation and School Level



Note: "Middle" refers to grade 7 students, and "High" refers to students in grades 9 and 11. Numbers indicate percentages of students responding "mostly Bs," "mostly As or Bs," or "mostly As" to item.

Discussion

LGBTQ Youth Compared to Non-Transgender and Straight Youth

Disparities in students' experiences and outcomes by sexual orientation and transgender identity vary considerably in size and direction depending on the measure being analyzed. The overall responses for students in LGBTQ subgroups tracked more closely with each other than with students who identified as non-transgender or straight. Across the 14 measures analyzed in this study, non-transgender and straight students were more likely to report positive school experiences and mental health than students in any of the other gender identity or sexual orientation subgroups. The biggest disparities between LGBTQ and non-LGBTQ students were evident in the measures of school safety, especially physical harassment and bullying at school, and in the measures of mental health. Across school levels, transgender, bisexual, and gay/lesbian students were more than twice as likely as their non-transgender and straight peers to report experiencing bullying or harassment. Rates of victimization for LGBTQ students were particularly high at the middle school level, with over 70 percent of transgender, gay or lesbian, and bisexual students reporting bullying or harassment. This finding is in line with previous research showing that bias and bias-based bullying and harassment of LGBTQ students is a serious problem for many schools (Greytak, Kosciw, Villenas, & Giga, 2016, p. 92).

The largest disparities by gender identity and sexual orientation were evident in the measures of students' mental health. Compared with their non-transgender and straight peers, LGBTQ students were disproportionately more likely to report struggling with mental health challenges. Rates of chronic sadness and suicidal ideation were particularly high among students identifying as transgender and bisexual. Between 61 and 63 percent of transgender students and between 66 and 68 percent of bisexual students reported chronic sadness, while over half of transgender students at both school levels and over half of bisexual students in middle school reported suicidal ideation, at rates three to four times higher than their non-transgender and straight peers. These findings are consistent with previous research showing LGBTQ youth overall are at a higher risk for depression and suicide than non-transgender and straight students (Marshal et al., 2011; Russell & Fish, 2016).

As the findings of this study illustrate, LGBTQ students are a diverse group in many respects, and disaggregating data by sexual orientation and gender identity reveals important nuances in LGBTQ students' experiences. Previous research has often overlooked this diversity, examining average outcomes for LGBTQ youth in general and conflating sexual orientation and gender identity. Schools and communities need a better understanding of these differences in order to better address the needs of all LGBTQ youth. Future research might focus on how sexual orientation and gender identity also intersect with other aspects of identity and experience — including race/ethnicity, age, and poverty — to influence youth outcomes.

Transgender Youth

Research has shown that transgender youth, especially transgender youth of color, are disproportionately targeted for violence and discrimination, putting them at higher risk than their peers, regardless of sexual orientation, for a number of negative health and academic outcomes (De Pedro, Gilreath, Jackson, & Esqueda, 2017; Johns et al., 2019; Greytak, Kosciw, & Diaz, 2009; Perez-Brumer, Day, Russell, & Hatzenbuehler, 2017; Reisner, Greytak, Parsons, & Ybarra, 2015; Russell, Ryan, Toomey, Diaz, & Sanchez, 2011). Analyses of California Healthy Kids Survey (CHKS) data produce results consistent with these earlier findings. In the sample described here, transgender students were more likely than non-transgender students to report negative mental health outcomes and school experiences. While the CHKS data on sexual orientation and transgender identity describe overlapping groups of students, it is also worth noting that transgender students overall reported negative school experiences at higher rates than did any of the individual sexual orientation subgroups included in this study. In general, the disparities between transgender and non-transgender students were consistent across middle and high school. However, mental health disparities between transgender and non-transgender students were notably greater among middle schoolers.

Gay, Lesbian, and Bisexual Youth

Research indicates the presence of significant disparities in health risks and academic outcomes by sexual orientation, with gay, lesbian, and bisexual youth at risk of bias-based violence and often lacking the family and community support enjoyed by their straight peers (Darwich, Hymel, & Waterhouse, 2012; Kann et al., 2016; Russell et al., 2001; Saewyc et al., 2007; Johns et al., 2019). The results presented here are consistent with previous studies, finding that gay, lesbian, and bisexual youth were over two times more likely than their straight peers to report being victims of harassment and to report fearing physical violence. They were also three to four times more likely to report chronic sadness and suicide ideation than their straight peers. Differences between gay/lesbian and bisexual students were often relatively small (1 to 3 percentage points) and varied in direction across measures. Among the biggest differences, bisexual students reported chronic sadness at higher rates (68% in high school) than any other sexual orientation or gender identity subgroup. Bisexual students were more likely than gay/lesbian or straight students to report suicide ideation, to report that mean lies or rumors were spread about themselves, or to report feeling unsafe in school. In contrast, the rates for harassment in high school were 6 percentage points higher among gay/lesbian students than among bisexual students. Given that bisexual youth were the largest of the LGBTQ sub-samples included in this study (6% of high school respondents), the negative findings of this study call for additional research on this population.

Youth Who Identify With a Sexual Orientation Other Than Straight, Gay, Lesbian, or Bisexual

Overall, the results indicate that youth who do not identify as gay, lesbian, bisexual, or straight still face many of the same challenges in school and in their mental health encountered by lesbian, gay, and bisexual youth. This finding is consistent with previous research showing that this group of youth is at higher risk of negative health outcomes compared to their straight peers (Matthews, Blosnich, Farmer, & Adams, 2014; Zhao, Montoro, Igartua, & Thombs, 2010; Stone et al., 2014). Survey responses by middle school students

who identified their sexual orientation as "something else" fell between those of straight students and those of gay, lesbian, and bisexual students on measures of supportive relationships with adults at school, physical or verbal victimization by peers, safety at school, mental health, school engagement, and academic performance. In contrast, high school students who reported their sexual orientation as "something else" were less likely than their gay, lesbian, or bisexual peers to report the presence of key school supports, feeling safe at school, and school engagement. Their responses on other survey measures were similar to those of gay, lesbian, and bisexual students.

Youth "Not Sure" or "Not Sure Yet" About Sexual Orientation and Transgender Identity

Some students who responded that they were "not sure" or "not sure yet" to questions about transgender identity or sexual orientation may have been in the process of exploring their gender identity — often described as "questioning" — or may have found that neither of the other response options ("Yes, I am transgender" or "No, I am not transgender") was an obvious fit. Similarly, students who responded "not sure yet" to the question about sexual orientation may have felt uncertain about how to define their sexual orientation. Regardless, students from both subgroups reported experiencing school and mental health challenges at rates between those of self-identified LGBTQ students and those of students who identified as straight or non-transgender, more closely tracking with the LGBTQ students.

In previous studies that have analyzed data from students who are questioning their sexual orientation, results vary, likely because of small samples and the method used for assessing sexual orientation (Darwich et al., 2012). However, researchers like Poteat, Aragon, Espelage, & Koenig (2009) found that youth questioning their sexual orientation reported the highest levels of peer victimization and stress relative to other youths, perhaps because they did not feel part of any other group. Schools already recognize childhood and adolescence as critical periods for identity development, and these findings underscore the need for communities and educators to actively support youth as they explore aspects of their identity related to gender and sexual orientation. Further research to understand the experiences of this subgroup of students could help to highlight successful strategies for schools and families seeking to support these students.

The Mediating Role of School Safety and School Supports

This study demonstrates that the perceived lack of school safety and school supports among transgender, gay, lesbian, bisexual, and other non-straight ("something else") students can explain a significant proportion of the disparities by sexual orientation and gender identity in students' school engagement, academic performance, and mental health. After the key school supports and safety measures used in this analysis were adjusted such that LGBTQ students perceived their schools to be equally as safe and equally as supportive as straight and non-transgender students perceived their schools to be, the disparities in these outcomes are substantially reduced, although not eliminated. The effects are similarly positive for students who reported being unsure about their gender identity or sexual orientation. These results are based on a statistical model that assumes that school supports and safety are causally related to mental health, school engagement, and academic performance. This model (the mediation model) assumes that there are no

reciprocal effects of mental health, school engagement, and academic achievement on school supports and safety. It is certainly likely that mental health, school engagement, and academic achievement also have feedback effects on students' perceptions of the school environment. Moreover, the relationships that we examine are correlational. The presence of a correlational relationship is not sufficient to demonstrate a causal relationship. To establish such a link, it is necessary to also show that perceived school supports and safety precede mental health, school engagement, and academic achievement in time, and that the relationships between these factors are not due to some other measured or unmeasured factor. Therefore, the extent to which school supports and school safety account for the disparities in reported mental health, student engagement, and academic performance may be overestimated and the results should be interpreted cautiously.

Nevertheless, these findings suggest that one path forward to addressing the needs of LGBTQ youth is to make schools and classrooms safe and supportive environments for students of all gender identities and sexual orientations. Specifically, the negative mental health and educational outcomes for LGBTQ youth found in this study might be reduced if schools prevented school-based victimization based on sexual orientation and gender identity; if LGBTQ students felt safer at school; if the adults at school developed caring relationships, communicated high expectations, and offered students more opportunities for meaningful participation; and if schools did more to welcome and encourage parent involvement.

Conclusion

The data presented here provide a valuable snapshot into the experiences and perceptions of LGBTQ students in California compared to their non-transgender and straight peers. Across grade levels (middle and high), students who identified as transgender, gay or lesbian, bisexual; were unsure (questioning) of their gender identity or sexual orientation; or indicated "something else" as their sexual orientation were all more likely to report lacking key school supports, being the target of physical or verbal victimization by peers, feeling less safe at school, being less engaged in school, having lower academic performance, and experiencing chronic sadness and suicide ideation. Moreover, this is a substantial population. Almost 14 percent of the sample in both middle and high school identified as having a sexual orientation other than heterosexual, and about 1 percent identified as transgender. Just under 5 percent indicated they were "not sure yet" about their sexual orientation, and approximately 2 percent indicated they were "not sure" if they were transgender.

Besides elucidating the specific perceptions of students in California, this study contributes to a broader understanding of the experiences and perceptions of LGBTQ students nationally because of the large sample size, the breadth of the indicators examined, the inclusion of both middle and high school data, and the focus on the role of school safety and school supports as they relate to outcomes. As demonstrated by the data described here, middle school LGBTQ students often but not always reported experiences and perceptions similar to those of LGBTQ students in high school, showing the need to conduct more research on this younger population.

This study provides a clearer picture of the needs and elevated risks of a wider range of the diverse community of LGBTQ youth, both in middle and high school, to guide both school and community programs. The findings add to the evidence that, overall, California secondary schools continue to be unsafe for LGBTQ students, as is evident in the levels of reported bullying and fear of physical violence they experience as well as their perceptions of school safety. Moreover, the trend is not positive. Biennial state CHKS data show that the rate of bias-based bullying related to sexual orientation changed little between the periods of 2011–13 and 2015–17 (Austin, Polik, Hanson, & Zheng, 2018). It declined by only two percentage points in grades 7 and 9, and that rate has been stable in grade 11. Bias-based bullying related to sexual orientation continues, unabated, to be reported by roughly 1 in 10 secondary students.

This study indicates that a large proportion of secondary students may be at elevated risk for negative school or health outcomes because of lack of support and because of discrimination based on their sexual orientation or gender identity. However, this is a challenge that schools have the tools to address. By implementing policies, services, and a culture of support that address LGBTQ students' unique needs and elevated risks, schools might provide a safer and more supportive environment in which all students can thrive and succeed.[4]

[4] Educators and administrators who are interested in learning about how to support LGBTQ students in their schools can find more information through national and local organizations including GLSEN (www.glsen.org), The Trevor Project (https://www.thetrevorproject.org/), and the ACLU (www.aclu.org/know-your-rights/lgbtq-rights/).

References

Ally Action. (2011). *Count me in: A toolkit for building LGBTQ-inclusive schools, quick start guide.* San Pablo, CA: Author.

Almeida, J., Johnson, R. M., Corliss, H. L., Molnar, B. E., & Azrael, D. (2009). Emotional distress among LGBT youth: The influence of perceived discrimination based on sexual orientation. *Journal of Youth and Adolescence, 38*(7), 1–21.

Austin, G., Nakamoto, J., & Bailey, J. (2010). *Racial/ethnic differences in school performance, engagement, safety, and supports. CHKS Factsheet #9.* (Developed by WestEd for the California Department of Education). San Francisco, CA: WestEd.

Austin, G., Polik, J., Hanson, T., & Zheng, C. (2018). *School climate, substance use, and student well-being in California, 2015–17. Results from the Sixteenth Biennial Statewide Student Survey, Grades 7, 9, and 11.* San Francisco, CA: WestEd. Retrieved from data.calschls.org/resources/Biennial_State_1517.pdf

Baams, L., Russell, S. T., & Talmage, C. A. (2017). Economic costs of bias-based bullying. *School Psychology Quarterly, 32*(3), 422–433.

Benard, B. (2004). *Resiliency: What we have learned.* San Francisco, CA: WestEd.

Birkett, M., Espelage, D. L., & Koenig, B. (2009). LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. *Journal of Youth and Adolescence, 38*, 989–1,000.

Blais, M., Bergeron, F. A., Duford, J., Boislard, M. A., & Hébert, M. (2015). Health outcomes of sexual-minority youth in Canada: An overview. *Adolescência Saude, 12*(3), 53–73.

Bontempo, D. E., & D'Augelli, A. R. (2002). Effects of at-school victimization and sexual orientation on lesbian, gay, or bisexual youths' health risk behavior. *Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine, 30*(5), 364.

Bouris, A., Everett, B. G., Heath, R. D., Elsaesser, C. E., & Neilands, T. B. (2016). Effects of victimization and violence on suicidal ideation and behaviors among sexual minority and heterosexual adolescents. *LGBT Health, 3*(2), 153–161.

Coulter, R. W. S., Schneider, S. K., Beadnell, B., & O'Donnell, L. (2017). Associations of outside- and within-school adult support on suicidality: Moderating effects of sexual orientation. *American Journal of Orthopsychiatry, 87*(6), 671–679.

Crossroads Collaborative at the University of Arizona & Gay-Straight Alliance Network. (2014). *LGBTQ youth of color: Discipline disparities, school push-out, and the school-to-prison pipeline.* Retrieved from https://gsanetwork.org/wp-content/uploads/2018/08/LGBTQ_brief_FINAL.pdf

Darwich, L., Hymel, S., & Waterhouse, T. (2012). School avoidance and substance use among lesbian, gay, bisexual, and questioning youths: The impact of peer victimization and adult support. *Journal of Educational Psychology, 104*(2), 381–392.

D'Augelli, A. R., Pilkington, N. W., & Hershberger, S. L. (2002). Incidence and mental health impact of sexual orientation victimization of lesbian, gay, and bisexual youths in high school. *School Psychology Quarterly, 17*(2), 148–167.

Davis, B., Stafford, M. B. R., & Pullig, C. (2014). How gay-straight alliance groups mitigate the relationship between gay-bias victimization and adolescent suicide attempts. *Journal of the American Academy of Child & Adolescent Psychiatry, 53*(12), 1271–1278e.

Day, J. K., Snapp, S. D., & Russell, S. T. (2016). Supportive, not punitive, practices reduce homophobic bullying and improve school connectedness. *Psychology of Sexual Orientation and Gender Diversity, 3,* 416.

De Pedro, K. T., Gilreath, T. D., Jackson, C., & Esqueda, M. C. (2017). Substance use among transgender students in California public middle and high schools. *Journal of School Health, 87*(5), 303–309.

Dowdy, E., Furlong, M., & Sharkey, J. (2013). Using surveillance of mental health to increase understanding of youth involvement in high risk behaviors: A value added analysis. *Journal of Emotional and Behavioral Disorders, 21*(1), 33–44.

Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence, 21*(1), 225–241.

GLSEN. (2019a). *Gender terminology: Discussion guide.* New York, NY: Author. Retrieved from https://www.glsen.org/sites/default/files/Gender%20Terminology%20Guide.pdf

GLSEN. (2019b). *School climate in California* (State snapshot). New York, NY: Author.

GLSEN, ASCA, ACSSW, & SSWAA. (2019). *Supporting safe and healthy schools for lesbian, gay, bisexual, transgender, and queer students: A national survey of school counselors, social workers, and psychologists.* New York, NY: GLSEN.

GLSEN & Harris Interactive. (2012). *Playgrounds and prejudice: Elementary school climate in the United States: A survey of teachers and students.* New York, N.Y: GLSEN. Retrieved from https://www.glsen.org/sites/default/files/Playgrounds%20%26%20Prejudice.pdf

Greytak, E. A., Kosciw, J. G., & Diaz, E. M. (2009). *Harsh realities: The experiences of transgender youth in our nation's schools. Gay, lesbian and straight education network*. New York, NY: GLSEN.

Greytak, E. A., Kosciw, J. G., Villenas, C., & Giga, N. M. (2016). *From teasing to torment: School climate revisited. A survey of U.S. secondary school students and teachers.* New York, NY: GLSEN.

Hatzenbuehler, M. L., Birkett, M., Van, W. A., & Meyer, I. H. (2014). Protective school climates and reduced risk for suicide ideation in sexual minority youths. *American Journal of Public Health, 104*(2), 279–286.

Johns, M. M., Lowry, R., Andrzejewski, J., Barrios, L. C., Demissie, Z., McManus, T., . . . Underwood, J. M. (2019). Transgender identity and experiences of violence victimization, substance use, suicide risk, and sexual risk behaviors among high school students — 19 states and large urban school districts, 2017. *Morbidity and Mortality Weekly Report, 68*(3), 67–71.

Kann, L., Olsen, E. O., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., . . . Zaza, S. (2016). Sexual identity, sex of sexual contacts, and health-related behaviors among students in grades 9–12 — United States and selected sites, 2015. *MMWR Surveillance Summary, 65*(9), 1–202.

Kosciw, J. G., Greytak, E. A., & Diaz, E. M. (2009). Who, what, where, when, and why: Demographic and ecological factors contributing to hostile school climate for lesbian, gay, bisexual and transgender youth. *Journal of Youth and Adolescence, 38,* 976–988.

Kosciw, J. G., Palmer, N. A., & Kull, R. M. (2015). Reflecting resiliency: Openness about sexual orientation and/or gender identity and its relationship to well-being and educational outcomes for LGBT students. *American Journal of Community Psychology, 55,* 167–178.

Kosciw, J. G., Palmer, N. A., Kull, R. M., & Greytak, E. A. (2013). The effect of negative school climate on academic outcomes for LGBT youth and the role of in-school supports. *Journal of School Violence, 12,* 45–63.

Liu, R. T., & Mustanski, B. (2012). Suicidal ideation and self-harm in lesbian, gay, bisexual, and transgender youth. *American Journal of Preventive Medicine, 42*(3), 221–228.

Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H. A., McGinley, J., . . . Brent, D. A. (2011). Suicidality and depression disparities between sexual minority and heterosexual youth: A meta-analytic review. *Journal of Adolescent Health, 49*, 115–123.

Marshall, A., Yarber, W. L., Sherwood-Laughlin, C. M., Gray, M. L., & Estell, D. B. (2015). Coping and survival skills: The role school personnel play regarding support for bullied sexual minority-oriented youth. *Journal of School Health, 85*(5), 334–340.

Marx, R. A., & Kettrey, H. H. (2016). Gay-straight alliances are associated with lower levels of school-based victimization of LGBTQ+ youth: A systematic review and meta-analysis. *Journal of Youth and Adolescence, 45*(7), 1269–1282.

Matthews, D. D., Blosnich, J. R., Farmer, G. W., & Adams, B. J. (2014). Operational definitions of sexual orientation and estimates of adolescent health risk behaviors. *LGBT Health, 1*(1), 42–49.

Morton, M. H., Samuels, G. M., Dworsky, A., & Patel, S. (2018). *Missed opportunities: LGBTQ youth homelessness in America.* Chicago, IL: Chapin Hall at the University of Chicago.

Mustanski, B. S., Garofolo, R., & Emerson, E. M. (2010). Mental health disorders, psychological distress, and suicidality in a diverse sample of lesbian, gay, bisexual, and transgender youths. *American Journal of Public Health, 100*(12), 2426–2432.

Perez-Brumer, A., Day, J. K., Russell, S. T., & Hatzenbuehler, M. L. (2017). Prevalence and correlates of suicidal ideation among transgender youth in California: Findings from a representative, population-based sample of high school students. *Journal of the American Academy of Child & Adolescent Psychiatry, 56*(9), 739–746.

Poteat, V. P., Aragon, S. R., Espelage, D. L., & Koenig, B. W. (2009). Psychosocial concerns of sexual minority youth: Complexity and caution in group differences. *Journal of Consulting and Clinical Psychology, 77*(1), 196–201.

Reisner, S. L., Greytak, E. A., Parsons, J. T., & Ybarra, M. L. (2015). Gender minority social stress in adolescence: Disparities in adolescent bullying and substance use by gender identity. *Journal of Sex Research, 52*(3), 243–256.

Rivers, I., & Noret, N. (2008). Well-being among same-sex- and opposite-sex-attracted youth at school. *School Psychology Review, 37*(2), 174–187.

Robinson, J. P., & Espelage, D. L. (2011). Inequities in educational and psychological attitudes between LGBTQ and straight students in middle and high school. *Educational Researcher, 40*(7), 315–330.

Russell, S. T., & Fish, J. N. (2016). Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. *Annual Review of Clinical Psychology, 12*, 465–487.

Russell, S. T., & Joyner, K. (2001). Adolescent sexual orientation and suicide risk: Evidence from a national study. *American Journal of Public Health, 91*(8), 1276–1281.

Russell, S. T., Kosciw, J., Horn, S., & Saewyc, E. (2010). Safe schools policy for LGBTQ students. *Social Policy Report, 24*(4), 3–13.

Russell, S. T., McGuire, J. K., Laub, C., Manke, E., O'Shaughnessy, M., Heck, K., & Calhoun, C. (2006). *Harassment in school based on actual or perceived sexual orientation: Prevalence and consequences.* (California Safe Schools Coalition Research Brief No. 2). San Francisco, CA: California Safe Schools Coalition.

Russell, S. T., Ryan, C., Toomey, R. B., Diaz, M. D., & Sanchez, J. (2011). Lesbian, gay, bisexual, and transgender adolescent school victimization: Implications for young adult health and adjustment. *Journal of School Health, 81*(5), 223–230.

Russell, S. T., Seif, H., & Truong, N. L. (2001). School outcomes of sexual minority youth in the United States: Evidence from a national study. *Journal of adolescence, 24*(1), 111–127.

Ryan, C., Russell, S. T., Huebner, D., Diaz, R., & Sanchez, J. (2010). Family acceptance in adolescence and the health of LGBT young adults. *Journal of Child and Adolescent Psychiatric Nursing, 23*(4), 205–213.

Saewyc, E. M., Skay, C. L., Hynds, P., Pettingell, S., Bearinger, L. H., Resnick, M. D., & Reis, E. (2007). Suicidal ideation and attempts in North American school-based surveys: Are bisexual youth at increasing risk? *Journal of LGBT Health Research, 3*(2), 25–36.

Shilo, G., & Savaya, R. (2011). Effects of family and friend support on LGB youths' mental health and sexual orientation milestones. *Family Relations, 60*(3), 318–330.

Skiba, R. J., Arredondo, M. I., & Raush, M. K. (2014). *New and developing research on disparities in discipline.* (Discipline Disparities Series: New Research). Bloomington, IN: The Equity Project at Indiana University, Center for Evaluation and Education Policy. Retrieved from http://www.njjn.org/uploads/digital-library/OSF_Discipline-Disparities_Disparity_NewResearch_3.18.14.pdf

Stone, D. M., Luo, F., Ouyang, L., Lippy, C., Hertz, M. F., & Crosby, A. E. (2014). Sexual orientation and suicide ideation, plans, attempts, and medically serious attempts: Evidence from local youth risk behavior surveys, 2001–2009. *American Journal of Public Health, 104*(2), 262–271.

Substance Abuse and Mental Health Services Administration [SAMHSA]. (2014). *A practitioner's resource guide: Helping families to support their LGBT children* (HHS Publication No. PEP14-LGBTKIDS). Rockville, MD: Author. Retrieved from https://store.samhsa.gov/system/files/pep14-lgbtkids.pdf

Toomey, R. B., Ryan, C., Diaz, R. M., & Russell, S. T. (2011). High school gay-straight alliances (GSAs) and young adult well-being: An examination of GSA presence, participation, and perceived effectiveness. *Applied Developmental Science, 15*(4), 175–185.

WestEd. (2018). *California School Climate Health & Learning Survey, research reader 2018.* San Francisco, CA: WestEd. Retrieved from https://calschls.org/docs/cschls_researchsum2018.pdf

Wilder, S. (2014). Effects of parental involvement on academic achievement: A meta-synthesis. *Educational Review, 66*(3), 377–397.

Zhao, Y., Montoro, R., Igartua, K., & Thombs, B. D. (2010). Suicidal ideation and attempt among adolescents reporting "unsure" sexual identity or heterosexual identity plus same-sex attraction or behavior: Forgotten groups? *Journal of the American Academy of Child and Adolescent Psychiatry, 49*, 104–113.

Appendix A: About the California Healthy Kids Survey

Data in this report are derived from the California Healthy Kids Survey (CHKS), developed in 1998 by WestEd for the California Department of Education (CDE). During the two academic years spanning 2017–19, the CHKS was administered by over 70 percent of California school districts to an average of about 600,000 elementary and secondary students per year (generally grades 5, 7, 9, and 11). The CHKS is part of CDE's California School Climate, Health, and Learning Survey (CalSCHLS) System along with companion surveys for school staff and parents.

The overarching goal of CalSCHLS is to provide data to help schools and communities:

- Create safe, supportive, and engaging environments for students, staff, and parents;
- Promote the successful cognitive, social, emotional, and physical development of all students; and
- Foster academic success, college and career readiness, and overall health and well-being.

Its focus is on identifying and addressing the needs of the whole child. Underlying the surveys is research supporting the importance of schools being academically challenging, caring, participatory, equitable, safe, and healthy for all stakeholders — and having data to determine how well schools are doing in meeting these goals.

LCAP Alignment. Equally important, the CHKS and CalSCHLS content are highly aligned with the state data requirements that every California school district must address in its LCAP. This alignment is particularly strong in regard to five priorities: school climate (connectedness and safety), pupil engagement, parental involvement, school facilities, and underserved subgroup needs.

Although the survey is voluntary, its LCAP alignment bodes well for a high level of continued participation in the survey. Accordingly, since the LCAP requirement was legislated, the number of districts that administer the survey every year has increased dramatically to one quarter of the districts in the state.

The California Healthy Kids Survey (CHKS)

The CHKS is a modular, anonymous assessment for students age 10 (grade 5) and above. It is focused on five main areas deemed most important for guiding school and student improvement:

- Student connectedness, learning engagement/motivation, school attendance (truancy, frequency, and reasons for absences), and academic performance (self-reported grades);
- School climate, culture, and conditions;

- School safety, including violence perpetration and victimization/bullying;
- Physical and mental well-being and social-emotional learning; and
- Student supports, including resilience-promoting developmental factors (caring relationships, high expectations, and meaningful participation).

All secondary schools participating in the survey are required to administer a Core Module containing key indicators that were identified by CDE staff and an expert advisory committee as most important for all schools and communities to assess in each of these areas.

The CHKS also has 16 supplementary modules that districts can elect to administer.

Assessing Needs of Disadvantaged and High-Need Populations. The secondary CHKS Core Module provides a wealth of demographic and background information, enabling all CHKS data to be analyzed by multiple population subgroups and the needs of disadvantaged and other high-need populations to be identified. These indicators include race/ethnicity, gender, financially disadvantaged, English language learners, foster youth, sexual orientation and identity, military-connected, and homeless. These data can also be analyzed by subgroups based on their self-reported behavioral characteristics, such as truants; chronic absentees; the disconnected or disengaged; the bullied; and those experiencing poor mental health or engaged in risk behaviors such as substance use, violence, or gang membership.

Supplemental School Climate Module. The most popular CHKS supplement is the School Climate Module, currently administered by about one-third of districts. The School Climate Module contains scales assessing academic mindset, teacher academic supports, how fair and equitable the school environment is, respect for diversity, clarity of school rules, discipline harshness, bullying prevention, social-emotional supports, positive peer relationships, and quality of school facilities and drinking water.

School Staff and Parent Surveys

The staff survey provides information about programs, policies, services, and supports at their schools. Constructs include restorative practices, conflict resolution, negative versus positive discipline, youth development strategies, and social-emotional learning. The staff survey helps shed light on the degree to which schools are providing environments and services aligned with the needs of students identified by the CHKS.

The parent survey sheds light on the degree to which parents have a voice at the school and are involved in their child's education.

Appendix B: Data Tables

TABLE B1.

Percentage of Students Reporting Measures of School Supports, School Safety, Mental Health, Academic Performance, and School Engagement, by Gender Identity and School Level

Construct	Not transgender	Transgender	Not sure
School Supports Domain			
Caring Adult Relationships scale (in school)			
Middle	63.4	42.3	51.5
High	59.9	44.6	47.0
High expectations scale			
Middle	76.4	53.0	66.4
High	70.1	50.8	56.0
Opportunities for Meaningful Participation scale (in school)			
Middle	30.5	25.0	26.7
High	27.5	26.4	23.7
Promotion of Parental Involvement scale			
Middle	61.3	44.5	54.4
High	47.6	34.1	37.6
School Safety Domain			
Perceived school safety			
Middle	64.9	37.0	47.8
High	58.9	36.4	40.5
Fear of being beaten up			
Middle	19.2	44.5	37.1
High	10.5	41.7	30.9
Any harassment or bullying			
Middle	34.3	70.3	57.5
High	28.4	65.3	55.5

Construct	Not transgender	Transgender	Not sure
Mean rumors or lies			
Middle	39.0	60.1	48.9
High	31.0	51.8	43.0
Mental Health Domain			
Chronic sadness			
Middle	26.3	60.9	51.2
High	33.3	63.4	58.1
Suicide ideation			
Middle	13.6	51.9	34.6
High	15.8	52.5	43.9
School Engagement Domain			
Academic Motivation scale			
Middle	77.1	53.6	68.5
High	72.1	48.0	57.0
School Connectedness scale			
Middle	64.9	41.2	52.2
High	58.1	38.3	42.4
Missed school			
Middle	47.2	58.1	48.9
High	53.9	65.8	56.1
Academic Performance Domain			
Self-reported grades earned			
Middle	68.3	56.6	63.1
High	64.0	49.9	58.6

Data Source: California Healthy Kids Survey, 2017–19.

TABLE B2.

Percentage of Students Reporting Measures of School Supports, School Safety, Mental Health, Academic Performance, and School Engagement, by Sexual Orientation and School Level

Construct	Straight	Gay/ Lesbian	Bisexual	Not sure yet	Something else
School Supports Domain					
Caring Adult Relationships scale (in school)					
Middle	64.1	51.7	50.0	58.3	54.9
High	60.5	54.8	53.1	54.5	49.0
High Expectations scale (in school)					
Middle	76.9	63.0	65.1	72.4	69.2
High	70.5	63.0	64.1	65.8	58.8
Opportunities for Meaningful Participation scale (in school)					
Middle	31.0	24.9	23.0	28.3	27.9
High	28.0	26.5	23.1	25.0	24.2
Promotion of Parental Involvement scale					
Middle	61.9	53.2	50.6	57.1	54.4
High	48.4	40.7	39.9	42.8	38.5
School Safety Domain					
Perceived school safety					
Middle	66.0	44.2	41.3	59.4	52.5
High	60.2	46.6	44.7	51.8	41.1
Fear of being beaten up					
Middle	18.1	39.8	38.0	27.0	30.1
High	9.6	25.3	20.9	17.9	25.1
Any harassment/bullying					
Middle	32.0	70.4	70.8	46.2	54.5
High	25.8	58.9	53.2	41.9	51.7
Mean rumors or lies					
Middle	38.1	55.8	61.3	42.2	44.9
High	29.7	42.5	47.9	35.7	40.1

Construct	Straight	Gay/ Lesbian	Bisexual	Not sure yet	Something else
Mental Health Domain					
Chronic sadness					
Middle	24.0	55.0	66.2	38.1	46.8
High	29.7	57.6	68.3	51.0	58.9
Suicide ideation					
Middle	11.6	42.3	49.7	22.5	32.4
High	13.0	39.1	46.5	30.9	41.5
School Engagement Domain					
Academic Motivation scale					
Middle	77.6	62.8	65.2	73.9	69.1
High	72.6	63.0	65.2	67.6	59.2
School Connectedness scale					
Middle	65.8	51.4	48.0	59.1	53.7
High	59.1	48.8	47.9	51.4	44.5
Missed school					
Middle	47.2	54.2	54.9	45.9	49.5
High	53.4	60.2	61.7	52.9	57.5
Academic Performance Domain					
Self-reported grades earned					
Middle	68.1	59.1	60.2	70.9	66.6
High	63.8	59.5	58.2	68.7	59.3

Data Source: California Healthy Kids Survey, 2017–19.